



**Marin Energy Authority  
Technical Committee Meeting  
Monday, August 12, 2013  
9:00 A.M.**

**Dawn Weisz**  
Executive Officer

**Damon Connolly**  
Chair  
City of San Rafael

**Kathrin Sears**  
Vice Chair  
County of Marin

**Bob McCaskill**  
City of Belvedere

**Sloan C. Bailey**  
Town of Corte Madera

**Larry Bragman**  
Town of Fairfax

**Len Rifkind**  
City of Larkspur

**Ken Wachtel**  
City of Mill Valley

**Denise Athas**  
City of Novato

**Tom Butt**  
City of Richmond

**Carla Small**  
Town of Ross

**Ford Greene**  
Town of San Anselmo

**Ray Withy**  
City of Sausalito

**Emmett O'Donnell**  
Town of Tiburon

**San Rafael Corporate Center, Boro Room  
750 Lindero Street, San Rafael, CA 94901**

**Agenda – Page 1 of 1**

- 1. Board Announcements (Discussion)**
- 2. Public Open Time (Discussion)**
- 3. Report from Executive Officer (Discussion)**
- 4. PG&E Bill Redesign (Discussion)**
- 5. Green-e Verification (Discussion)**
- 6. Economic Considerations of MCE Expansion (Discussion)**
- 7. Local Solar Partnership Plan (Discussion/Action)**
- 8. Board Member & Staff Matters (Discussion)**
- 9. Adjourn**

781 Lincoln Avenue  
Suite 320  
San Rafael, CA 94901

1 (888) 632-3674  
[mceCleanEnergy.com](http://mceCleanEnergy.com)



Agenda material can be inspected in the Marin County Sheriff's lobby, located at 3501 Civic Center Drive, San Rafael, CA 94903. The meeting facilities are in accessible locations. If you are a person with a disability and require this document in an alternate format (example: Braille, Large Print, Audiotape, CD-ROM), you may request it by using the contact information below. If you require accommodation (example: ASL Interpreter, reader, note taker) to participate in any MEA program, service or activity, you may request an accommodation by calling (415) 464-6032 (voice) or 711 for the California Relay Service or by e-mail at [djackson@mceCleanEnergy.com](mailto:djackson@mceCleanEnergy.com) not less than **four work days** in advance of the event.



# PG&E Bill Redesign

## How PG&E's August Bill Will Affect MCE Customers



# PG&E Bill Redesign

- PG&E outreach starts now
- Transitional Bill in July-August cycle
- Regular new bill in September
- Larger bill (8.5x11), larger text
- More historical information
- Clearer information for CCA/DA
  - Inclusion of full “bundled” PG&E rates
  - “Generation Credit” for CCA/DA

# Page 1 - Summary

Demonstration Powered by HP Exstream 06/20/2013, Version 8.0

## ENERGY STATEMENT

www.pge.com/MyEnergy

**Service For:**  
Sample CCA Customer

**Questions about your bill?**  
24 hours per day, 7 days per week  
Phone: 1-866-743-0335  
www.pge.com/MyEnergy

**Local Office Address**  
111 ALMADEN BLVD  
SAN JOSE, CA 95113

**Important Messages**  
Your charges on this page are separated into delivery charges from PG&E and generation or procurement charges from an energy provider other than PG&E. These two charges are for different services and are not duplicate charges.

Please return this portion with your payment. No staples or paper clips. Do not fold. Thank you.

**Account Number:** 1023456789-0  
**Due Date:** 08/07/2013  
**Total Amount Due:** \$146.61  
**Amount Enclosed:** \$

RESIDENTIAL CUSTOMER - CCA  
1234 MAIN STREET  
ANYTOWN, CA 00000  
EXTRA ADDRESS LINE

PG&E  
BOX 997300  
SACRAMENTO, CA 95899-7300

Page 1 of 5  
Recycled Paper  
85% Post Consumer Waste

Zone	Description
A	Account No and Due Date top of each page
B	"Service For" – includes premise address
C	Breakdown of PG&E and MCE Charges
D	Questions directed to CCA dedicated line
E	Special Programs in which customer is enrolled
F	Monthly Billing History \$ - compare current bill with same bill last year
G	Daily Usage Comparison graph – includes Electric and Gas
H	Explanation of breakdown of charges and other important messages
I	Payment Stub now located bottom of first page



# Page 2 – Information & Delivery

Documentation Provided by PG&E Form 06/20/2013, Version 8.0.115 64-bit AUGUST 2013 Doc: 5477592350-8  
**ENERGY STATEMENT**  
 Statement Date: 06/27/2013  
 Due Date: 07/15/2013  
[www.pge.com/MyEnergy](http://www.pge.com/MyEnergy)

## Important Phone Numbers - 24 hours per day, 7 days per week

**Customer Service (All Languages; Relay Calls Accepted) 1-800-743-5000**  
**TDD/TTY (Speech/Hearing Impaired) 1-800-452-4712**

Statistics of Charge or Expense (Spanish) 1-800-882-6758  
 统计账单数据 (Chinese) 1-800-882-6666

Delivery Service Inquiry (Vietnamese) 1-800-288-6208  
 Business Customer Service 1-800-688-6763

### Notes and rules

You may dispute a line item. Find out how to dispute a line item, a complete list of rules and rates, and areas you can call 1-800-743-5000.

If you believe there is an error on your bill, please call 1-800-743-5000 to speak with a representative. If you are not satisfied with our response, contact the California Public Utilities Commission (CPUC), Consumer Affairs Branch, 500 Van Ness Avenue, San Francisco, CA 94102. 1-800-499-5079 or 415-704-0203. TDD/TTY.

To avoid being penalized for not paying for CPUC action, include a deposit check payable to the CPUC for the included amount and a description of the dispute. The CPUC will not accept deposits for matters that relate directly to billing amounts. If a deposit is made, your deposit amount will be the CPUC. PG&E cannot refund your deposit if you dispute while the order is in the CPUC. However, you must continue to pay your current charges to keep your service uninterrupted.

If you are not able to pay your bill, you may be able to help by applying for a payment plan with PG&E's credit program or other special programs and agreements that are available to you. You may qualify for PG&E's Energy Savings Assistance Program which is a savings allowance program for income-qualified residential customers.

### Important definitions

**Notating usage blocks** are added to charges without additional notice due to weather conditions.

**Demand charge** Many residential rates include demand charges. Demand is a measurement of the highest usage of electricity any single day (or sometimes first 15-minute period during a specified cycle). Demand is measured in kilowatts (kW). High demand is usually associated with increased electricity requirements and results in a higher price for electricity. You may be able to reduce demand and reduce your demand charges.

**Time-of-use electricity prices** are higher on weekdays afternoons and lower at other times of the day. The price you pay also changes by season. Prices are higher in the summer and lower in the winter.

**DRM total charge** Shows the cost of funds received by the Department of Public Resources (DPR) to purchase power to serve electric customers during the California emergency. DRM total charges are included on demand DRMs and demand charges (DCs).

**DRM power charge** Includes the generation charges for energy provided by the Department of Public Resources. The amount of this charge is provided by DPR and included by PG&E as DPR's agent in 2015. CPUC will retain 10% of the total demand charge which affects the generation charges in the 90.

**Power Charge Imbalance Adjustment (PCIA)** Ensures that customers who purchase electricity (generation) from PG&E support the system's overall generation costs, subject to some exceptions for their reporting, unless otherwise exempt.

**See PG&E Payment Program (PPS) Surcharge** Used to fund other-related gas distribution for low-income customers, energy efficiency programs, and other investments in infrastructure.

For more information, visit [www.pge.com/MyEnergy](http://www.pge.com/MyEnergy) for more information.

### Your Electric Charges Breakdown

Transmission	\$1.80
Distribution	\$87.69
Public Purpose Programs	\$1.79
Nuclear Decommissioning	0.00
DRM Bond Charge	3.94
Competitor Transition Charges (CTC)	0.00
Energy Cost Recovery Amount	3.95
PCIA	4.07
Time and Other	\$1.00
<b>Total Electric Charges</b>	<b>\$94.10</b>

Zone	Description
A	Definitions of tiers and "Tier 1" replaces "Baseline"
B	Component costs moved from page 3 – Details of Electric Delivery Charges
C	Change contact information
D	Ways to pay are listed

Matches \$  
amount on  
Page 3

"DRM" refers to Public Resources Commission's Department of Public Resources (DPR) to purchase power to serve electric customers during the California emergency. For more information, visit [www.pge.com/MyEnergy](http://www.pge.com/MyEnergy) for more information.

### Update My Information (English Only)

Provide your contact information for changes to take effect.

**Account Number: 5477592350-8**

Change My Billing Address To:

City \_\_\_\_\_ State \_\_\_\_\_ ZIP code \_\_\_\_\_  
 Street \_\_\_\_\_  
 Office \_\_\_\_\_ Email \_\_\_\_\_

### Ways To Pay

- Online at [www.pge.com/MyEnergy](http://www.pge.com/MyEnergy)
- PG&E's Mobile Bill Pay
- Automatic Payment Service: Sign up to have your automatic payments sent from your bank account each month.
- By mail: Send your payment along with this payment stub to the address provided.
- By debit card: Visa, MasterCard or Discover: Call 1-877-506-8370 at any time. (Our representatives can assist you with your transaction.)
- At a PG&E payment center or local office: To find a payment center or local office near you, please visit [www.pge.com](http://www.pge.com) or call 1-800-743-5000. Please bring a signed copy of this bill with you.

# Page 3 – PG&E Delivery Charges



## ENERGY STATEMENT

[www.pge.com/MyEnergy](http://www.pge.com/MyEnergy)

Account No: 1023456789-0

Statement Date: 07/17/2013

Due Date: 08/07/2013

A

### Details of PG&E Electric Delivery

07/01/2013 - 07/09/2013 (9 billing days)

Service For: 1234 Main Street

Service Agreement ID: 9087654321

Rate Schedule: E1 XB Residential Service

B

07/01/2013 - 07/09/2013 Your Tier Usage

			1	2	3	4
Tier 1 Allowance	99.00	kWh	(9 days x 11.0 kWh/day)			
Tier 1 Usage	99.000000	kWh	@	\$0.12845		\$12.72
Tier 2 Usage	20.700000	kWh	@	\$0.14802		4.34
Tier 3 Usage	08.300000	kWh	@	\$0.28001		20.49
Tier 4 Usage	214.000000	kWh	@	\$0.33001		71.82

C

Generation Credit	-28.14
Power Charge Indifference Adjustment	2.71
Franchise Fee Surcharge	0.21

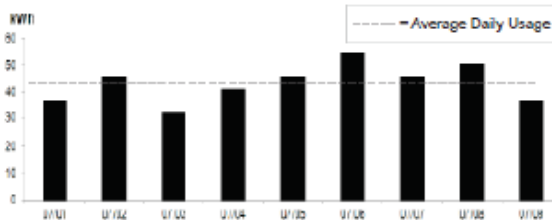
D

**Total Electric Charges \$83.15**

2009 Vintage Power Charge Indifference Adjustment

E

Electric Usage This Period: 412.000000 kWh, 9 billing days



### Service Information

Motor #	1008765432
Current Meter Reading	4,200
Prior Meter Reading	3,878
Total Usage	412.000000 kWh
Baseline Territory	X
Heat Source	Not Electric
Serial	F
Rotating Outage Block	5M

## Zone

## Description

A

Indicates charge is for "Delivery"

B

Includes "Tier Usage" and cost per tier kWh

C

- "Generation Credit" shows unbundled generation charges subtracted from the Total Electric Charges

- "Power Charge Indifference Adjustment" was embedded in the Cost Responsibility Surcharge (CRS) line item in the old bill. Now it is broken out as a separate line item – **it is not a new charge**. The CRS components are all listed on page 2 of the new bill.

D

Lists the applicable Vintage year

E

Depicts average daily usage



Visit [www.pge.com/myenergy](http://www.pge.com/myenergy) for a detailed bill comparison.

# Page 4 – MCE Generation Charges



## ENERGY STATEMENT

[www.pge.com/MyEnergy](http://www.pge.com/MyEnergy)

Account No: 1023456789-0

Statement Date: 07/17/2013

Due Date: 08/07/2013

A

### Details of MCE Electric Generation Charges

05/24/2013 - 06/25/2013 (33 billing days)

Service For: 2701 CAROLD R

Service Agreement ID: 5477592650 ESP Customer Number: 5477592616

05/24/2013 – 06/25/2013

Rate Schedule: RES-1

GENERATION - TOTAL 690.136320 kWh @ \$0.06900 \$47.62

Net Charges 47.62

MCE's charges for clean, renewable energy replace PGE's electric generation charges. PGE still charges for delivering electricity. There are no duplicate electric charges. Questions? Call 1-888-632-3674 or visit [marincleanenergy.com](http://marincleanenergy.com)

Energy Surcharge 0.01

**Total MCE Electric Generation  
Charges**

**\$47.63**

### Service Information

Meter # 1086705432  
Current Meter Reading 4,260  
Prior Meter Reading 3,878  
Total Usage 412.000000 kWh  
Baseline Territory X  
Heat Source Not Electric  
Serial F  
Rotating Outage Block 5M

B

For questions regarding charges on this page, please contact:

MCE  
781 LINCOLN AVE STE 320  
SAN RAFAEL, CA 94901  
1-888-632-3674  
[www.mcedcleanenergy.com](http://www.mcedcleanenergy.com)

### Additional Messages

For questions regarding your charges on this page, please contact your Third Party Energy Service Provider.

## Zone

## Description

A

MCE Generation Charges are displayed on a separate page

B

MCE service information listed

*No change  
in format*

New bills go out August 1<sup>st</sup>



**MARIN ENERGY AUTHORITY  
INDEPENDENT ACCOUNTANT'S REPORT ON  
APPLYING AGREED-UPON PROCEDURES  
REPORTING YEAR 2012**

## MARIN ENERGY AUTHORITY

### CONTENTS

Reporting Year 2012

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<b>Supplementary Information</b>	
Appendix A: Green-e Energy Attestation from Program Participant	2



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Los Angeles  
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Woodland Hills  
Monterey Park  
San Francisco

## **INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES**

To the Board of Directors:  
Marin Energy Authority  
San Rafael, California

And

Center for Resource Solutions  
San Francisco, California



We have performed the procedures enumerated below, which were agreed to by Marin Energy Authority (the "Participant"), solely to assist the specified parties in evaluating the Participant's compliance with the annual reporting and verification requirements for the Center for Resource Solutions' Green-e Energy certification program for the Reporting Year ("RY") 2012. Management of the Participant is responsible for the compliance with those requirements. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The results and conclusions reached based on the procedures performed herein, are predicated on the basis that we have received complete and accurate data on which these procedures are performed.

We performed the following procedures detailed in the Green-e Energy Annual Verification Audit Protocol, which applied to the Participant during the Reporting Year ended December 31, 2012:

### **1. Supply and Supporting Documentation**

#### **Applicability and Intent of the Section**

All Green-e Energy Participants with certified sales in RY2012 must show that they have purchased or generated enough renewable MWh to support their certified sales, verify eligibility of facilities supplying renewable MWh to Participant, and provide data to prevent double counting of renewable MWh by certain purchasers of electricity that has been separated from RECs.

#### **Background and Important Reminders for the Section**

- Supply that has already been allocated to prior RY sales, even if it meets the 21-month generation period of eligibility for RY2012, should not be listed. Supply reported as eligible on the Participant's prior RY's software submission may only be listed in the software system for RY2012 if that supply was not allocated to sales in the prior RY. Eligible carryover are excess MWh listed in the supply section of RY2011 but not sold in wholesale or retail sales. The facilities that generated eligible carryover should be listed in RY2012's Facility Information section under a given facility's supply details.

100 W San Fernando St., Suite 365 San Jose, CA 95113 T: 408.294.3924 F: 408.295.3925

877.754.4557



## **1. Supply and Supporting Documentation (Continued)**

### **Background and Important Reminders for the Section (Continued)**

- A number of audit steps will require you to review attestations and/or Tracking System Reports. It may save time during the audit to conduct all steps pertaining to attestations during a single review of all attestations rather than reviewing all attestations once per audit step and therefore reviewing all attestations multiple times. All attestations and Tracking System Reports are available under their respective sections and also under Audit Participant Data>>View or Download Supporting Documents.
- All data, attestations and other supporting documents are stored in Green-e Energy's online verification software system. For many audit steps, you may want to have multiple web browser windows open with your client's data submission available, so that you can flip between screens without having to navigate back and forth between screens.
- EIA (Energy Information Administration) numbers for generation facilities should be the Plant or Facility ID number, and not the Utility ID number; the EIA assigns unique numbers for both.
- In some cases, a facility may have registered in a tracking system partway through 2012, such that part of the generation was not issued RECs in a tracking system and some was issued RECs in a tracking system. In these cases, treat the generation from the period prior to joining a tracking system as one facility and the generation from the period after joining the tracking system as separate facilities for the purposes of Steps III.1.6-12 and III.1.19.

### **Software System Pages Needed:**

- Facility Information table (Audit Participant Data>>View Participants Data>>Supply, also available in the "View All" table, Audit Participant Data>>View Participants Data>>View All)
- Generation Information table (Audit Participant Data>>View Participants Data>>Supply>>View Generation; accessed by clicking on "View Generation" on the Facility Information table)
- Supporting Documents (Audit Participant Data>>View or Download Supporting Documents) to view all submitted Supporting Documents, or to view Supporting Documents for specific facilities go to (View Participants Data>>Supply>>View Generation>>Supporting Documents)
- Participant's Products, Notes & Customers (Audit Participant Data>>Participant's Products, Notes & Customers)

### **Agreed Upon Procedures for the Section**

#### **1. Obtain from the Participant:**

- if the Participant sold any Green-e Energy certified products in the year prior to the current Reporting Year (RY), obtain the completed Annual Verification Submission from that prior RY
- contracts or other company records that provide information on the name and other identifying characteristics of the generating facility, the amount of renewable MWh purchased/generated from it, the date of generation, and the wholesale supplier from which the MWh were purchased
- copies of meter readings and the most recent meter certifications for all generators listed that the Participant owns that are supplying MWh toward Green-e Energy certified sales in the RY being verified
- any documentation of Low-Impact Hydropower Institute (LIHI) certification for U.S. hydroelectric facilities if certification is not listed on the LIHI website

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

#### 1. Obtain from the Participant (continued)

- any documentation of EcoLogo certification for Canadian facilities if certification is not listed on the EcoLogo website
- log-in information for the Participant's accounts in all Tracking Systems (unless the Participant will be logging in and guiding you through their accounts)

Step III.1.1 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

2. For every renewable electricity or REC purchase transaction listed in the supply section of the verification software system, the Participant must have documentation demonstrating the transfer of ownership of renewable MWh from generator through to Participant, even if ownership of the REC has passed through many parties before reaching the Participant. If the Participant is the generator, Participant must still supply attestations for the amount of generation they are claiming toward sales this RY. Note if the Participant has not supplied attestations in a manner consistent with Appendix D, which describes which documentation must be supplied in various scenarios. Note any exceptions.

Step III.1.2 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

3. For all facilities on the Facility Information table (Audit Participant Data>>View Participants Data>>Supply) that have "No" listed under "Approved Tracking Attestation" and that have a tracking system name under "Tracking System," check that each such facility has a corresponding attestation uploaded in the software system. This can be checked through the aggregate "Supporting Documents" page (Audit Participant Data>>View or Download Supporting Documents) for all facilities or through the Generation Information table for an individual facility. Note any exceptions. Such facilities must provide Tracking Attestations or Generator, Wholesale or Small Generator Attestation showing the full chain of custody; remind Participant of this requirement if any facilities are noted in this step.

Step III.1.3 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities that have "No" listed under "Approved Tracking Attestation" and that have a tracking system name under "Tracking System". As such, this step is not applicable and was not performed.

4. For all attestations, only official Green-e Energy forms with a modification date of January 2007 or later (as listed in the lower left of each page) will be accepted. Current versions for comparison are available at [http://green-e.org/verif\\_docs.html](http://green-e.org/verif_docs.html). Note any exceptions.



**1. Supply and Supporting Documentation (Continued)**

**Agreed Upon Procedures for the Section (Continued)**

4. (continued)

Step III.1.4 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

5. For all U.S. facilities with Hydro as a resource type, on the Facility Information table, check that the facility is listed on the Low-Impact Hydropower Institute website, at: <http://www.lowimpacthydro.org/cf.aspx>. Note any exceptions. Check that the date of LIHI certification is on or before the first generation date of all renewable MWh being claimed from a LIHI certified facility, and that the expiration date of LIHI certification (typically 5 years after the date of certification) is after the last generation date on such renewable MWh. Note any exceptions.

Step III.1.5 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities with Hydro as a resource type. As such, this step is not applicable and was not performed.

6. For each facility without a Tracking System name on the Facility Information table, check that the facility was not registered in a tracking system during the period of generation claimed as supply. Use the following map to determine the applicable tracking system:  
<http://etna.org/images/ETNNA-Tracking-System-Map.gif>. Check the following tracking system generator lists:

ERCOT: <https://www.texasrenewables.com/publicReports/rpt1.asp>

MIRECS: <https://portal2.mirecs.org/myModule/rpt/myrpt.asp?r=111>

MRETS: <https://portal2.m-rets.com/myModule/rpt/myrpt.asp?r=111>

NAR: <https://narenrenewables2.apx.com/myModule/rpt/myrpt.asp?r=111>

NCRETS: <https://portal2.ncrets.org/myModule/rpt/myrpt.asp?r=111>

NE-GIS: <https://www.nepoolgis.com/mymodule/mypage.asp>

PJM-GATS: <https://gats.pjm-eis.com/myModule/rpt/myrpt.asp?r=229>

WREGIS: <https://portal2.wregis.org/myModule/rpt/myrpt.asp?r=111>

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

6. (continued)

You may need to click through several screens or perform a search within the public report. List any facilities that appear on one of the above sites and contact the Participant about providing a Tracking System Report.

For facilities identified through this step as being in a Tracking System during the period of claimed generation, facility's Tracking ID must be added to Participant's Facility Information table.

Once a Tracking System Report is obtained for the supply, apply Step III.1.11 to the supply and Step III.1.10 to the Tracking System Report. If MWh from facility identified as being in a Tracking System were purchased by Participant in a Green-e Energy certified wholesale transaction, then in some cases, a Tracking System Report is necessary; consult Section III of Appendix E.

Step III.1.6 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities that are not in a Tracking System. As such, this step is not applicable and was not performed.

7. For each facility that is not in a Tracking System, if the Participant purchased the MWh from the generator or is the owner of the generating facility, examine the Generator Attestation or Small Generator Attestation for each purchase and/or amount of generation recorded on the respective Generation Information table. If the Participant owns the generation facility, Participant is still required to supply a Generator Attestation or Small Generator Attestation listing Participant as Seller and as purchaser.

- Use Appendix D for general guidance on attestation types and chain of custody documentation.
- From the attestation, note all facilities that have a First Operation Date prior to 1/1/1998, and all facilities that list any date under Date of Repowering or Upgrade.
- Confirm that the generating facility name, generator location (state), EIA or QF ID number, nameplate capacity, first operational date, and fuel/resource type listed in the Facility Information table match what is listed on the Generator Attestation.
- If the fuel/resource type is biomass-based, check that either "Gaseous Biomass" is entered as the resource type in the Facility Information table for landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases, or "Non-gaseous Biomass" is entered for wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass. Confirm that Section IV of the Generator Attestation, "Additional statement required for and applicable to biomass facilities only," has been completed.
- Note if the Participant is not named in these documents as the Purchaser of the renewable MWh.

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

7. (continued)

- Confirm that the date of generation listed in the Generation Information table matches what is listed in Generator Attestation or Small Generator Attestation. The MWh volume listed on the attestation must be greater than or equal to the MWh volume listed in “MWh” column in the Generation Information table. If the Participant completed the “MWh listed on attestation” column in the Generation Information table, then the MWh volume listed on the attestation must match this value.
- In the Declaration Section of the attestation (Section III), confirm that if the “renewable electricity (electricity bundled with renewable attributes)” box is marked, then “Elec” is listed in Facility Information table. If “renewable attributes only” is marked, confirm that “REC” is listed in the Facility Information table.
- Confirm that the “No” box is checked in the cap and trade section of the Generator Attestation (Declaration, Section III). If the “Yes” box is checked, note the cap-and-trade program, refer Participant to footnote 7 of the National Standard and contact Green-e Energy staff immediately.
- Confirm that each attestation is signed by an agent of the Seller.
- Confirm that the entity listed under “If Seller is providing only RECs to Purchaser and selling the associated electricity to a utility or load-serving entity, please write the name of the utility or load-serving entity here” on the attestation matches the entity listed in the Facility Information table.
- Note any exceptions.

Step III.1.7 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for “No” or “N/A”:

We noted no facilities that are not in a Tracking System and for which the Participant purchased the MWh from the generator or is the owner of the generating facility. As such, this step is not applicable and was not performed.

8. For each facility that is not in a Tracking System, if the Participant purchased renewable MWh from another Green-e Energy Participant in the form of a Green-e Energy certified wholesale product, examine the Wholesale Attestation for each purchase and/or amount of generation recorded on the Facility Information table. If “Yes” is indicated for “Selling as Green-e Energy certified Wholesale?” in the rightmost column of the sales table on the Wholesale Attestation that also lists the Participant as the purchaser, check that the Seller is listed in Appendix F. If the Seller is listed in Appendix F, then the Wholesale Attestation is the only document needed for the chain of custody for the renewable MWh listed on the attestation. If the Seller is not listed in Appendix F, or if “No” is indicated for “Selling as Green-e Energy certified Wholesale?” in the rightmost column of the sales table on the Wholesale Attestation, apply Step III.1.9 to the supply listed on the attestation instead of this Step III.1.8.

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

8. (continued)

- Use Appendix D for general guidance on attestation types and chain of custody documentation.
- From the attestation, note all facilities that have a First Operation Date prior to 1/1/1998, and all facilities that list any date under Date of Repowering or Upgrade.
- Confirm that the Wholesale Attestation names the Participant as the purchaser of the RECs or renewable electricity.
- Confirm that the generating facility name, facility ID number, nameplate capacity, first operational date, and fuel/resource type listed in the Facility Information table match what is listed on the Wholesale Attestation.
- If the fuel/resource type is biomass-based, check that either "Gaseous Biomass" is entered in the Facility Information table for landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases, or "Non-gaseous Biomass" is entered for wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass.
- Confirm that the date of generation and volume of MWh in the Generation Information table match what is listed in the Wholesale Attestation. The MWh volume listed on the attestation must be greater than or equal to the MWh volume listed in the Generation Information table.
- In the Declaration Section of the Wholesale Attestation (Section II), confirm that if the "electricity bundled with renewable attributes" is marked, then "Electricity" is listed in the Purchase type column of the Facility Information table. If "renewable attributes only" is marked, confirm that "REC" is listed in the Facility Information table.
- Confirm that each attestation is signed by an agent of the Seller.
- Note any exceptions.

Step III.1.8 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities that are not in a Tracking System, where the Participant purchased renewable MWh in the form another Green-e Energy Participant in the form of a Green-e Energy certified wholesale product. As such, this step is not applicable and was not performed.

9. For each facility that is not in a Tracking System, and for which the Participant purchased renewable MWh in the form of a non-Green-e Energy certified wholesale product, examine the Wholesale Attestation(s), and Generator Attestation for each purchase and/or amount of generation recorded on the Generation Information table. If "No" is indicated, or the field is blank, for "Selling as Green-e Energy certified Wholesale?" in the rightmost column of the sales table on the Wholesale Attestation that lists the Participant as the purchaser, complete this Step III.1.9. If "Yes" is indicated for "Selling as Green-e Energy certified Wholesale?" in the rightmost column of the sales table on the Wholesale Attestation, complete Step III.1.8 instead.

## **1. Supply and Supporting Documentation (Continued)**

### **Agreed Upon Procedures for the Section (Continued)**

#### 9. (continued)

- Use Appendix D for general guidance on attestation types and chain of custody documentation.
- From the attestation, note all facilities that have a First Operation Date prior to 1/1/1998, and all facilities that list any date under Date of Repowering or Upgrade.
- Trace and confirm complete documentation of the chain of custody of the renewable MWh:
  - Obtain a completed and signed Wholesale Attestation that lists the Participant as the purchaser and the Seller as the entity listed as the Supplier in the Facility Information table.
  - Obtain one or more completed and signed Wholesale Attestations, one for each transfer of ownership of the renewable MWh from the generator, all intermediaries, and the Participant. Each purchaser named on the preceding attestation must be the seller on the next attestation, until the Participant is listed as the purchaser on the final attestation.
  - Obtain a completed and signed Generator Attestation from the generator that names the seller in the last Wholesale Attestation as the purchaser of the renewable MWh.
- Confirm that the generating facility name, facility ID number, nameplate capacity, first operational date, and fuel/resource type listed in the Facility Information table match what is listed on each Wholesale Attestation and the Generator Attestation.
- If the fuel/resource type is biomass-based, check that either "Gaseous Biomass" is entered in the Facility Information table for landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases, or "Non-gaseous Biomass" is entered for wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass. Confirm that Section IV of the Generator Attestation, "Additional statement required for and applicable to biomass facilities only," has been completed.
- Confirm that the generator location (state or province) listed on the Facility Information table matches the Generator Attestation.
- Confirm that the date of generation and volume of MWh listed in the Generation Information table match what is listed in each Wholesale Attestation and the Generator Attestation. The MWh volume listed on the attestation must be greater than or equal to the MWh volume listed in the Generation Information table.
- For the Wholesale Attestation that names the Participant as the purchaser, in the Declaration Section of the Wholesale Attestation (Section II), confirm that if the "electricity bundled with renewable attributes" is marked, then "Electricity" is listed in the Purchase Type column of the Facility Information table. If "renewable attributes only" is marked, confirm that "REC" is listed in the Facility Information table.
- Confirm that the "No" box is checked in the cap and trade section of the Generator Attestation (Declaration, Section III). If the "Yes" box is checked, note the cap-and-trade program, refer Participant to footnote 7 of the National Standard and contact Green-e Energy staff immediately.
- Confirm that each attestation is signed by an agent of the Seller.
- Confirm that the entity listed under "If Seller is providing only RECs to Purchaser and selling the associated electricity to a utility or load-serving entity, please write the name of the utility or load-serving entity here" on the Generator Attestation matches the entity listed as the Entity Purchasing Electricity in the Facility Information table.



## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

9. (continued)

- Note any exceptions.

Step III.1.9 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities that are not in a Tracking System, where the Participant purchased renewable MWh in the form of a non-Green-e Energy certified wholesale product. As such, this step is not applicable and was not performed.

10. Examine each of the Participant's Tracking System Reports and for all MWh sold from each facility in a Tracking System, as indicated by a valid Tracking System name appearing on the Facility Information table for the facility or as identified in Step III.1.6, perform the following steps. For guidance on what documentation is appropriate if a question arises, refer to Appendices D and E, covering attestations and tracking system reports, respectively.

#### Facility Information table

- Confirm that the following information on the Facility Information table corresponds to what is listed on the Tracking System Report: generating facility name (Facility) facility ID number (Tracking System ID), and fuel/resource type (Resource Type). Note any exceptions. ERCOT Tracking System Reports list only a facility's ID number and not its name; you do not need to note this as an exception.
- Review the facility online date listed in the Tracking System Report and note all facilities that have a First Operation Date prior to 1/1/1998.
- If the fuel/resource type listed on the Tracking System Report is biomass-based, check that the fuel/resource type matches the corresponding Resource Type on the Facility Information table according to the following breakdown: "Gaseous Biomass" includes landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases; "Non-gaseous Biomass" includes wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass.

#### Generation Information table

- Confirm that the date of generation listed on the Generation Information table for each facility (Audit Participant Data>>View Participants Data>>Supply>>View Generation; accessed by clicking on "View Generation" on the Facility Information table) matches what is listed in the Tracking System Report, and that the corresponding volume of MWh on the Generation Information table is less than or equal to what is listed in the Tracking System Report in aggregate for that month (in the case of ERCOT, confirm by quarter of generation).
- For facilities with "Yes" under the "Approved Tracking Attestation?" column on the Facility Information table, confirm that the date of generation listed in Month/Quarter and Year on the Generation Information table falls between the Start Date and Exp. Date listed on that facility's row on the downloadable list of approved facilities on the Audit Protocol and Training page within the verification software.

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

10. (continued)

#### Generation Information table (continued)

- If a facility is in a Tracking System for the period of generation listed on the Generation Information table, but the Tracking System column on the Facility Information table does not show a tracking system name, the Participant will still have to provide a valid Tracking System Report for the generation.
- Confirm that the MWh listed under “Total Generation Volume (MWh)” on the Facility Information table for tracked facilities were retired or transferred to another account holder according to the Tracking System Reports. “Pending” or “Active” transactions are not acceptable. Confirm that the “Retirement Reason” or “Memo” field of each retirement includes, at minimum, the terms “Green-e Energy” and “2012”. See Appendix E for required Tracking System memo language for each Tracking System.
- Participants may provide the Serial Numbers of RECs in Tracking Systems, in the Generation Information table. Providing serial numbers is an optional step in the software system, but if this information may be useful in conducting the audit if it is provided. Comparison of provided serial numbers to Tracking System Reports is not required under this Protocol.

#### General

- Note if Participant is not named as the owner of the Tracking System account that generated the Tracking System Report. If Participant is not named as the owner of the account, note whether Participant is named as the retiree or transferor of the amount of MWh on the Tracking System Report. If Participant is not named as the owner of the Tracking System account that generated the Tracking System Report, and the Participant is not named in the Retirement Reason or Memo fields (see also Appendix E for specific field names by Tracking System), Participant must supply chain of custody documentation back to the point of retirement. Therefore, note whether Participant has provided one or more completed Wholesale Attestations that match the retirement and that document the chain of custody starting from REC retirement on the Tracking System Report.
- Log into Participant’s corresponding Tracking System account, or view an employee of Participant accessing the account, and compare each Tracking System Report to data in Participant’s corresponding Tracking System account.
- The Participant does not need to provide Tracking System documentation showing transfer of the RECs into Participant’s account.
- Note any exceptions discovered at any point during this step.

Step III.1.10 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for “No” or “N/A”:

## **1. Supply and Supporting Documentation (Continued)**

### **Agreed Upon Procedures for the Section (Continued)**

11. For all facilities that have “No” listed under “Approved Tracking Attestation” and that have a tracking system name under “Tracking System” and for which Participant submitted Generator, Wholesale or Small Generator Attestations (this includes those facilities identified in Step III.1.3 as using Generator, Wholesale or Small Generator Attestation), AND for all facilities identified in Step III.1.6 as being in a tracking system, AND for facilities that have “Yes” listed under “Approved Tracking Attestation” and that Participant purchased as a Green-e Energy certified wholesale purchase and did not provide a Tracking System Report:
- Use Appendix D for general guidance on attestation types and chain of custody documentation.
  - From the attestations, note all facilities (and the corresponding dates) that have a First Operation Date prior to 1/1/1998, and all facilities that list any date under Date of Repowering or Upgrade.
  - Trace and confirm complete documentation of the chain of custody of the renewable MWh:
    - Obtain a completed and signed Wholesale Attestation that lists the Participant as the purchaser and the Seller as the entity listed as the Supplier in the Facility Information table.
    - Obtain one or more completed and signed Wholesale Attestations, one for each transfer of ownership of the renewable MWh from the generator, all intermediaries, and the Participant. Each purchaser named on the preceding attestation must be the seller on the next attestation, until the Participant is listed as the purchaser on the final attestation.
    - Obtain completed and signed Generator Attestation from the generator that names the seller in the last Wholesale Attestation as the purchaser of the renewable MWh.
      - If no Generator Attestation is provided, and the earliest Wholesale Attestation in the chain of custody both lists a Seller that is listed in Appendix F and indicates “Yes” under “Selling as Green-e Energy certified Wholesale?” in the rightmost column of the sales table, then no attestation documents further up the chain of custody than such a Wholesale Attestation are necessary. This is because the upstream seller of a certified wholesale transaction will provide documentation further up the chain of custody.
  - Confirm that the generating facility name, facility ID number, nameplate capacity, first operational date, and fuel/resource type listed in the Facility Information table match what is listed on each Wholesale Attestation and the Generator Attestation.
  - If the fuel/resource type is biomass-based, check that either “Gaseous Biomass” is entered in the Facility Information table for landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases, or “Non-gaseous Biomass” is entered for wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass. Confirm that Section IV of the Generator Attestation, “Additional statement required for and applicable to biomass facilities only,” has been completed.
  - Confirm that the generator location (state or province) listed on the Facility Information table matches the Generator Attestation.
  - Confirm that the date of generation and volume of MWh listed in the Generation Information table match what is listed in each Wholesale Attestation and the Generator Attestation. The MWh volume listed on the attestation must be greater than or equal to the MWh volume listed in the Generation Information table.

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

#### 11. (continued)

- For the Wholesale Attestation that names the Participant as the purchaser, in the Declaration Section of the Wholesale Attestation (Section II), confirm that if the “electricity bundled with renewable attributes” is marked, then “Electricity” is listed in the Purchase Type column of the Facility Information table. If “renewable attributes only” is marked, confirm that “REC” is listed in the Facility Information table.
- Confirm that the “No” box is checked in the cap and trade section of the Generator Attestation (Declaration, Section III). If the “Yes” box is checked, note the cap-and-trade program, refer Participant to footnote 7 of the National Standard and contact Green-e Energy staff immediately.
- Confirm that each attestation is signed by an agent of the Seller.
- Confirm that the entity listed under “If Seller is providing only RECs to Purchaser and selling the associated electricity to a utility or load-serving entity, please write the name of the utility or load-serving entity here” on the Generator Attestation matches the entity listed as the Entity Purchasing Electricity in the Facility Information table.
- Note any exceptions.

Step III.1.11 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for “No” or “N/A”:

We noted no facilities that have “No” listed under “Approved Tracking Attestation” and that have a tracking system named under “Tracking System”, and no facilities that have “Yes” listed under “Approved Tracking Attestation” and where the Participant purchased RECs as a Green-e Energy certified wholesale purchase and did not provide a Tracking System Report. As such, this step is not applicable and was not performed.

12. For all facilities that have “No” listed under “Approved Tracking Attestation” and that have a tracking system name under “Tracking System,” and for which Participant submitted a Tracking Attestation (this includes those facilities identified in Step III.1.3 as using Tracking Attestations), perform the following steps:

#### Facility Information table

- Confirm that the following information on the Facility Information table corresponds to what is listed on the Tracking Attestation: generating facility name (Facility) facility ID number (Tracking System ID), fuel/resource type (Resource Type), nameplate capacity (Capacity), and online date (First Operation Date). Note any exceptions.
- Note all facilities (and the corresponding dates) that have a First Operation Date prior to 1/1/1998, and all facilities that list any date under Date of Capacity Upgrade or Repowering on the Tracking Attestation.

## 1. Supply and Supporting Documentation (Continued)

### Agreed Upon Procedures for the Section (Continued)

12. (continued)

#### Facility Information table (continued)

- If the fuel/resource type listed on the Tracking Attestation is biomass-based, check that the fuel/resource type matches the corresponding Resource Type on the Facility Information table according to the following breakdown: "Gaseous Biomass" includes landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases; "Non-gaseous Biomass" includes wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass. Confirm that Section III of the Tracking Attestation, "Additional statement required for and applicable to biomass facilities only," has been completed.
- Confirm that the date of generation listed in the Generation Information table falls between the Start Date and End Date listed on the Tracking Attestation.
- Confirm that the "No" box is checked in the cap and trade section of the Tracking Attestation (Facility and Registration Information, Section I). If the "Yes" box is checked, note the cap-and-trade program, refer Participant to footnote 7 of the National Standard and contact Green-e Energy staff immediately.
- Confirm that each attestation is signed by an agent of the Seller or Account Manager as indicated on the Tracking Attestation.
- Confirm that the entity listed under "If Seller is providing only RECs to Purchaser and selling the associated electricity to a utility or load-serving entity, please write the name of the utility or load-serving entity here" on the Generator Attestation matches the entity listed as the Entity Purchasing Electricity in the Facility Information table. List all such facilities by name and Tracking System ID in the "Exceptions, Notes..." field below.
- Note any exceptions.

Step III.1.12 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

13. This Step III.1.13 applies to MWh for which no Tracking System Report is required. Use the Sampling Guidelines listed in Section II.8 of this Protocol to determine the appropriate sample size for the number of entries and apply this step for those entries in the sample. For this step, the sampling unit is purchases and/or generation quarters from a facility. Compare each selected item per the Generation Information and Facility Information tables to a copy of the billing invoice that contains information regarding renewable MWh purchased and/or generated, date of generation (the date of generation can be in terms of month/year), and resource type. Note, it may be necessary to also examine a copy of the contract or other documents to test this information (specify in the Auditor's Agreed-Upon Procedures Report if the contract or other documents were used). Note any exceptions. This step is not necessary for purchases and/or generation for which a Tracking System Report was provided from Participant's account or naming Participant specifically in the retirement reason / memo.



**1. Supply and Supporting Documentation (Continued)**

**Agreed Upon Procedures for the Section (Continued)**

13. (continued)

Step III.1.13 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities for which Tracking System Reports were not provided. As such, this step is not applicable and was not performed.

14. For all purchases sampled in Step III.1.13, examine the purchase date on each billing invoice. Report as an exception any purchases after June 17, 2013. For supply in a Tracking System reported toward RY2012 sales, if the Date of Submission to the Auditor (Reporting Tools>>Audit Status) is after June 17, 2013, also examine the date of transfer to the Participant on each Tracking System Report (this can be done in conjunction with Step III.1.10); if you find any transfers occurring after June 17, 2013, review the corresponding supply contract for the date of signature. If the date of signature is after June 17, 2013, note as an exception. If the Participant is submitting the Annual Verification Submission beyond the June 17, 2013 verification submission deadline, check **all** purchase dates (not just a sample) and **all** dates of REC receipt in Tracking Systems.

Step III.1.14 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

15. Check that all facilities have a date on or after 1/1/1998 in the First Operation Date column of the Facility Information table. For all facilities with a date before 1/1/1998 in that column or with "Yes" in the Re-Powered column, check that there is a Repowering Letter signed by a Center for Resource Solutions employee on file with CRS, either uploaded by Participant in the verification software or otherwise indicated as approved in the verification software. If letter has been uploaded by Participant, confirm that information on the submitted letter agrees with corresponding facility information in the verification software system: Facility Name, First Operation Date, Re-Powered Date, and Resource Type. Note any exceptions.

Step III.1.15 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities that have a date on or after 1/1/1998 in the First Operation Date column of the Facility Information table. As such, this step is not applicable and was not performed.

**1. Supply and Supporting Documentation (Continued)****Agreed Upon Procedures for the Section (Continued)**

## 16. (continued)

For all facilities with Gaseous Biomass or Non-gaseous Biomass as a resource type on the Facility Information table, examine the Biomass section of the attestation and note any biomass fuels that are not allowed under the Green-e Energy National Standard, Section II.A.5. Be aware that the resource type "Gaseous Biomass" includes landfill gas (LFG), wastewater methane, digester gas, biogas, and other biogenic gases, and that "Nongaseous Biomass" includes wood waste, sawmill waste, black liquor, agricultural waste, ethanol, fuel crops or any other liquid or solid biomass. Note any exceptions.

Step III 1.16 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities with Gaseous Biomass or Non-gaseous Biomass as a resource type on the Facility Information Table. As such, this step is not applicable and was not performed.

17. For all facilities not in a Tracking System listing a resource type of Gaseous Biomass or Non-gaseous Biomass compare the generator's name and location to the appropriate government database of renewable electricity generators. For US facilities, use the Form 860 database (available at: <http://www.eia.gov/cneaf/electricity/page/eia860.html>) to determine whether the biomass fuel is being co-fired with a non-eligible fuel. For Canadian facilities, check the database of the Province of facility location. List biomass facilities that are labeled as co-firing or multi-fuel, or that do not appear in the most recent EIA Form 860 database or Provincial database, or do not have corresponding Co-firing Approval Letters uploaded into the verification software. Note any exceptions.

Step III.1.17 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities with Gaseous Biomass or Non-gaseous Biomass as a resource type. As such, this step is not applicable and was not performed.

18. For all facilities not in a Tracking System (even if EcoLogo certified) with a number greater than 5% in the "Co-Firing %" column, check that there is a Co-firing Letter signed by a Center for Resource Solutions employee on file with CRS, either uploaded by Participant in the verification software or otherwise indicated as approved in the verification software. If letter has been uploaded by Participant, confirm that the details of the letter correspond to facility information entered in the software system. If no letter was submitted, check that the Participant submitted a Tracking Attestation and Tracking Report to substantiate their ownership of the facility's renewable MWh. The most common co-firing facilities are industrial facilities that burn Non-gaseous Biomass with fossil fuels (for example, pulp and paper mills). Note any exceptions.

**1. Supply and Supporting Documentation (Continued)**

**Agreed Upon Procedures for the Section (Continued)**

18. (continued)

Step III.1.18 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities, not in a Tracking System with a number greater than 5% in the "Co-Firing %" column. As such, this step is not applicable and was not performed.

19. If the Participant sold Green-e Energy certified products in RY2011, and the purchases and/or generation reported as supply for RY2012 includes generation that occurred July 1, 2011, through March 31, 2012, verify that generation from that 9-month period was not claimed for sales made in RY2011 by reviewing the Participant's Annual Verification Submission from RY2011. If the facilities being reviewed are in tracking systems or were at the time of use in the prior RY, also check Tracking System Reports for the prior RY to check that the MWh reported as supply in RY2012 were not already retired for a purpose other than support of RY2012 certified sales. Note any exceptions.

Step III.1.19 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted the Participant did not sell Green-e Energy certified products in RY2011. As such, this step is not applicable and was not performed.

20. For facilities located in Maine, note if the "Check box if sale is part of a Qualifying Facility (QF) contract" field on the Generation Attestation(s) is checked off. If so, note the date that the contract with the utility was initiated and if the facility is a Qualifying Facility (QF) under the Federal Energy Regulatory Commission.

Step III.1.20 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Maine. As such, this step is not applicable and was not performed.

21. For facilities located in Connecticut and where only RECs were purchased by the Participant, note if the Generation Attestation has the "Check box if sale is part of a Qualifying Facility (QF) contract" box checked off.

Step III.1.21 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Connecticut. As such, this step is not applicable and was not performed.

**1. Supply and Supporting Documentation (Continued)**

**Agreed Upon Procedures for the Section (Continued)**

22. Note any generators located in Texas that use renewable resources other than wind and were first operational on or after September 1, 2005.

Step III.1.22 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Texas that use renewable resources other than wind and were first operational on or after September 1, 2005.

23. Note whether any facilities are located in Hawaii. Facilities in Hawaii are not eligible and should not be included in the Participant's Green-e Energy certified products.

Step III.1.23 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Hawaii.

24. If any supply is located in Canada, confirm that the facility was EcoLogo certified during the period of generation being claimed toward the RY being verified by checking the EcoLogo website, at: <http://www.ecologo.org/en/participatingcompanies/>. Note any exceptions. If the EcoLogo website does not list the supplying facility, request documentation from the Participant that shows that the facility is EcoLogo certified. Note any exceptions.

Step III.1.24 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Canada. As such, this step is not applicable and was not performed.

25. For facilities on the Facility Information table that are owned by the Participant and not tracked in a Tracking System, compare the MWh recorded as "Total Generation Volume (MWh)" on the Facility Information table to meter readings made by an independent third-party (such as a scheduling coordinator or a meter data management agent) at the generation side of the busbar. Agree the generator name and location to an attestation or to other documents such as the generator FERC registration or state operating permit that substantiates the name and type of generation facility. Also obtain from the Participant a copy of the most recent meter certification and note the date of the certification below. Note any exceptions.

Step III.1.25 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities on the Facility Information table that are owned by the Participant. As such, this step is not applicable and was not performed.

**1. Supply and Supporting Documentation (Continued)**

**Agreed Upon Procedures for the Section (Continued)**

26. If any Small Generator Attestations were supplied for a generator on the Facility Information table, compare each Small Generator Attestation and the respective small generator's entry in the Generation Information table for the renewable MWh supplied to Participant. If the generation supplied is broken down by quarter in the Generation Information table and the attestation does not record generation by quarter:

- 2011 generation listed on the attestation should be listed as Q3/2011 in the Generation Table
- 2012 generation listed on the attestation should be listed as Q1/2012 in the Generation Table
- 2013 generation listed on the attestation should be listed as Q1/2013 in the Generation Table

If the generation supplied is broken down by quarter in the Small Generator Attestation and the corresponding generation on the Generation Information table is broken down by quarter, no further action is necessary for that attestation under this step.

Step III.1.26 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

Participant did not provide any Small Generator Attestations. As such, this step is not applicable and was not performed.

27. Obtain from the Participant a copy of the Green-e Energy Attestation from Program Participant (which is Appendix G of the Getting Started Guide). Make sure this attestation is included with the final Annual Verification Submission. Note any exceptions.

Step III.1.27 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

28. Check the Participant's Products, Notes & Customers (Audit Participant Data>>Participant's Products, Notes & Customers) for any additional audit steps to be performed. Describe here what steps were performed. Note any exceptions.

Step III.1.28 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that no additional audit steps are required to be performed.

**Additional Auditor Comments**

None.



## **2. Green-e Energy Certified Wholesale Sales**

### **Applicability and Intent of the Section**

This section applies to Participants that sold renewable MWh in Green-e Energy Certified wholesale transactions, with the intent of verifying certified sales made to other sellers of renewable MWh.

### **Background and Important Reminders for the Section**

- In almost all cases, certified sales to any other Green-e Energy Participant will be a wholesale sale and should be listed under the Wholesale Sales section; see Appendix F for a list of Participants taking part in Green-e Energy in RY2012.
- Customers that are using the renewable energy and not reselling it are retail customers and should not be accounted for under Wholesale Sales.

### **Software System Pages needed:**

- Wholesale Sales table (Audit Participant Data>>View Participant's Data>>Wholesale Sales), also found on the "View All" table (Audit Participant Data>>View Participant's Data>>View All)
- Wholesale Details table(Audit Participant Data>>View Participant's Data>>Wholesale Sales>>Wholesale Details); accessed by clicking on "Details" on the Wholesale Sales table

### **Agreed Upon Procedures for Wholesale Sales**

#### **1. Obtain from Participant:**

- Sales contracts with wholesale customers
- bills of sale or invoices for sales to wholesale customers
- any other company records that contain information on wholesale customers and their purchases of Green-e Energy Certified products

Step III.2.1 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not sell renewable MWh in Green-e Energy Certified wholesale transactions. As such, this step is not applicable and was not performed.

**2. Green-e Energy Certified Wholesale Sales (Continued)****Agreed Upon Procedures for the Wholesale sales (Continued)**

2. Using the Sampling Guidelines in Section II.8, select a sample of wholesale customers listed on the Wholesale Sales table and perform the following for each item. For this step, the sampling unit is an individual quarter/month of wholesale sale delivery to an individual customer from and individual facility. Compare each selected sampling unit to a copy of the corresponding billing invoice (e.g. the bill sent to the Participant's customer) that contains information regarding generator name, MWh resold, date of generation, date of sale to wholesale customer, name of wholesale customer and resource type for the wholesale transaction to the customer (the date of generation can be in terms of month/year or quarter/year). Note, it may be necessary to also examine a copy of the contract or other documents to test the information (specify in the Agreed-Upon Procedures Report if the contract or other documents were used). Be aware that contracts may be written to cover multiple years of sales, so only compare 2012 sales and deliveries to wholesale sales information in the software system for multi-year contracts. For Participants sourcing from a facility that is registered in an approved electronic Tracking System (as indicated on the Facility Information table), a Tracking System Report can substitute for the billing invoice if it substantiates generator name, MWh resold, date of generation, date of sale to wholesale customer, name of wholesale customer, resource type and the fact that the sale was Green-e Energy certified in the RY being verified (see Appendix E for acceptable ways that certification and RY can be indicated in each Tracking System). Note any exceptions.

Step III.2.2 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

Population Size (required, must fill in): 0

Sample Size (required, must fill in): 0

We noted that the Participant did not sell renewable MWh in Green-e Energy Certified wholesale transactions. As such, this step is not applicable and was not performed.

3. Compare customers listed in the Wholesale Sales table (Audit Participant Data>>View Participant's Data >> Wholesale Sales) with an "N" under "Green-e Energy Participant" to the list of Green-e Energy Participants in Appendix F. Note any such customers on the Wholesale Sales table that have names similar to a company listed in Appendix F.

Step III.2.3 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not sell renewable MWh in Green-e Energy Certified wholesale transactions. As such, this step is not applicable and was not performed.

4. For facilities listed in Wholesale Details page that are in a Tracking System, check that the corresponding MWh were transferred or retired in the Tracking System Reports on behalf of the corresponding customer. "Pending" or "Active" transactions are not acceptable. Note any exceptions.

## **2. Green-e Energy Certified Wholesale Sales (Continued)**

### **Agreed Upon Procedures for the Wholesale sales (Continued)**

4. (continued)

Step III.2.4 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not sell renewable MWh in Green-e Energy Certified wholesale transactions. As such, this step is not applicable and was not performed.

### **Additional Auditor Comments**

None.

## **3. Green-e Energy Certified Retail Sales**

### **Background and Important Reminders for Retail Sales Review**

- Companies listed in Appendix F are not retail customers. Sales to such companies should only be listed under Wholesale Sales.
- Each certified retail product appears on a single Retail Sales Detail page.
- Each Retail Sales Detail page contains information on:
  - Non-Residential Sales;
  - Residential Sales;
  - Resource Mix: Claimed and Calculated (Product Content Labels);
  - Block/percent of use
  - Marketplace Customers;
  - LEED Customer Data;
  - Electric Vehicle (EV) Charging Stations;
  - Retail Customers Purchasing 100,000 MWh or More;
  - Retail Sales of Product through Distributor Utilities
- For companies with offices in multiple locations, count the customer location as where they were billed. If offices of the same company in different locations bought certified products separately, count them as separate customers.

### **Software Pages Needed for These Steps**

- Retail Sales Details for each retail product for which they reported certified sale: Audit Participant Data>>View Participant's Data>>Retail Sales>>Sales Details, also available on the "View All" table (Audit Participant Data>>View Participant's Data>>View All)
- Participant's Products, Notes & Customers: Audit Participant Data>>Participant's Products, Notes & Customers

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Total Retail sales

#### Applicability and Intent of the Section

This section of the Protocol applies to all participants who had retail sales in the given calendar year. It does not apply to wholesale sales.

The intent of Retail Sales reporting is to verify the volume of certified sales made to retail customers by the Participant in the RY2012.

#### Agreed Upon Procedures for Retail Sales

##### 1. Obtain from Participant:

- Participant company billing statements, which may include invoices to customers, evidence of paid invoices, and/or delivery receipt letters
- documentation supporting the amount of renewable energy sold under each product name / contract with Green-e Energy
- contracts for sale of certified products if such contracts call for very specific renewable resources
- documentation supporting the number of customers buying each product, with type of customer (residential vs. non-residential / commercial), the MWh sold to each customer, and the customer location (state or province)
- for Utility Green Pricing products only, a copy of documentation that verifies that the Green-e Energy certified green pricing products sold are cost-based rates

Step III.3.1 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

2. Using copies of internal reporting documents that the Participant used to provide retail sales data, recalculate the amount of MWh of sales and number of customers by product for each customer type, residential and non-residential and agree this to the retail sales reported by state in the respective tables in "Audit Participant Data >> View Participant's Data >> Retail Sales >> Sales Details". Note any exceptions.

Step III.3.2 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

3. For products with a "Block Size" listed in the Block/Percent table, divide the total MWh sold by the block size. Confirm that this result matches the total blocks sold in Participant's internal sales records. Note any exceptions.

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for Retail Sales (Continued)

3. (continued)

Step III.3.3 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no products with a "Block Size" listed in the Block/Percent table. As such, this step is not applicable and was not performed.

4. Viewing the "Block/Percent" table on the "Retail Sales >> Sales Details" page for each retail product, for each row with "Percent" entered in the "Type" column, verify the percent renewable listed in the "Block/Percent" column by comparing total renewables sold in the product in the "Block/Percent Sold" column (which indicates MWh) with total electricity sales for the product from Participant's internal sales records. Note any exceptions.

Step III.3.4 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

5. For electricity products where the "Percent that is Renewable" in the Block/Percent table is less than 100%, confirm with Participant that the MWh listed for that product are only for the eligible renewable MWh sold, and do not include MWh from non-eligible resources. Note any exceptions.

Step III.3.5 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted the Participant did not sell products with a "Percent that is Renewable" less than 100%. As such, this step is not applicable and is not performed.

6. Using the Sampling Guidelines in Section II.8, select a sample of customer sales transactions detailed in the internal company documents for customers that purchased fewer than 100,000 MWh of renewable electricity or RECs from Participant. For this step, the sampling unit is defined as an individual REC sale to a retail customer (for Participants with REC contracts with Green-e Energy) or all delivery of renewable electricity over 2012 to an individual customer (for Participants with electricity contracts with Green-e Energy).

- i. Compare for each selected item (from the internal company documents) the MWh sold per customer to a copy of the billing statements and any other necessary records that contain the MWh retail sales by product by customer (specify in the report what, if any, other record was used). Note any exceptions.
- ii. For each transaction of a block electricity product or REC product, verify that the amount of renewables sold was equal to or greater than 100 kWh. Note any exceptions.

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for Retail Sales (Continued)

6. (continued)

- iii. For Participants selling certified Green Pricing or Competitive Electricity products: if Participant does not have customer billing records for the full calendar year, then sample from the month(s) in the calendar year that are available, and note those months below. Note any exceptions.
- iv. For Multiple Mix contracts, note instances when internal records indicate that residential or individual customers purchased the certified product.
- v. For Multiple Mix contracts, for each customer sampled, review the purchase agreement, contract or other document from prior to product delivery, and identify whether RECs or renewable electricity from a particular generating facility were promised. For those sales that did specify a facility up front, track the total MWh from each specified facility and each sampled contract, and check that each facility and a sufficient number of MWh from the specified generation dates appear on the Facility Information table and / or aggregated Generator Information tables. Note any exceptions.

Step III.3.6 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

Population Size (required, must fill in): 14,001 monthly customer transactions

Sample Size (required, must fill in): 60

7. If Participant's billing cycles do not correspond exactly with the calendar year, Participant may prorate the sales for the first and/or last billing cycle of the year. If sales are prorated, note this in the Agreed-Upon Procedures Report and describe method used for prorating.

Step III.3.7 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant's billing cycles do not correspond exactly with the calendar year and the sales were prorated. The Participant prorated their sales using total usage during the billing period divided by the number of days in the billing period, resulting in a figure representing average daily usage; this figure was, in turn, multiplied by the number of days in the billing period that occurred in 2012.

8. This step applies to Utility Green Pricing Participants only. Obtain a copy of documentation from the Participant that verifies that the Green-e Energy certified green pricing product(s) sold by the Participant were offered at cost-based rates in the RY under consideration. Note any exceptions.

- i. If the product offering has been approved by the state Public Utilities Commission (or equivalent) or other state regulatory agency, obtain a copy of the regulatory agency's approval of the rate charged for the green pricing product as being cost-based.

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for Retail Sales (Continued)

8. (continued)

- ii. If no regulatory agency documentation is available, then examine other regulatory documents, such as filings submitted to the Federal Energy Regulatory Commission and other company documents to verify that the product was sold at rates determined in a manner similarly to the Participant's other product offerings.

Step III.3.8 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant is not a Utility Green Pricing Participant. As such, this step is not applicable and was not performed.

- 9. This step applies to Utility Green Pricing Participants only. Obtain from the Participant the contact information for the utility's oversight body (public utilities commission, utility board, city council, or other oversight body). Contact the oversight body and confirm with them in writing that the utility's green pricing program was in compliance with all rules imposed upon the program by the oversight body during 2012. Note any exceptions.

Step III.3.9 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant is not a Utility Green Pricing Participant. As such, this step is not applicable and was not performed.

#### Verification of Retail Product Content

#### Audit Procedures for Resource Mix: Claimed and Calculated

- 10. For each Single Mix or Utility Green Pricing retail product for which the Participant reported certified sales, on the "Audit Participant Data>> View Participant's Data >> Retail Sales >> Sales Details" page under the "Resource Mix: Claimed and Calculated" table:

- i. Agree the percentages reported in the "Actual Power Mix" (or equivalent "Calculated PCL") column in the document under "Prospective PCL". Note any differences that are greater than 4 percentage points (as rounded).
- ii. Agree the percentages reported in the "Actual Power Mix" (or equivalent "Calculated PCL") column in the document under "Historic PCL". Note any differences that are greater than 1 percentage point (as rounded).

Step III.3.10 was performed: ☒ Yes. ☐ No. ☐ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for the Section (Continued)

#### Sales to Individual Retail Customers – Marketplace and Purchasers, 100,000 MWh or More, and LEED customers

#### Applicability and Intent of the Section

This section applies to Participants that sold retail products to commercial customers, and does not apply to Participants with only retail residential and wholesale certified sales. It is intended to verify the sales made to customers that participate in Green-e Marketplace as well as sales to customers that purchased 100,000 MWh or more in total in 2012.

#### Agreed Upon Procedures for the Section

11. Referencing retail sales records documents, confirm that all retail customers that purchased 100,000 MWh or more in total from Participant are listed on “Retail Customers Purchasing 100,000 MWh or More”. Note any exceptions.

Step III.3.11 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for “No” or “N/A”:

We noted the Participant does not have any single retail customer that purchased 100,000 MWh or more in total. As such, this step is not applicable and was not performed.

12. Confirm that all customers listed on Audit Participant Data>> Participant’s Products, Notes & Customers as being Green-e Marketplace participants also appear under “Marketplace Customers” on “Audit Participant Data>> View Participant’s Data >> Retail Sales >> Sales” Details. Note any exceptions.

Step III.3.12 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for “No” or “N/A”:

We noted the Participant does not have any Marketplace Customers. As such, this step is not applicable and was not performed.

13. For each customer listed under “Retail Customers Purchasing 100,000 MWh or More” and “Marketplace Customers”, compare the MWh sold to the customer to a copy of the billing statements and any other necessary records that contain the MWh retail sales by product by customer for 2012 (specify in the report what, if any, other record was used). Multi-year contracts that cover some or all of 2012 should indicate the amount delivered for 2012, or contain information sufficient to determine the amount delivered for each year of the contract, note if this is not the case.

- i. Confirm that the information entered in the data table corresponding to large customers and Marketplace customers matches information on the document/record used. Note any exceptions.



### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for the Section (Continued)

13. (continued)

- ii. For Multiple Mix contracts, for each customer sampled, review the purchase agreement, contract or other document from prior to product delivery, and identify whether RECs / renewable electricity from a particular generating facility were promised. For those sales that did specify a facility up front, track the total MWh from each specified facility and each contract, add this to the corresponding totals calculated in Step III.3.6.v, and check that each facility and a sufficient number of MWh from the specified generation dates appear on the Facility Information table and / or aggregated Generator Information tables to cover all sales for which a specific facility was promised (both sales from Step III.3.6.v and this Marketplace and large customer section). Note any exceptions.

Step III.3.13 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not sell more than 100,000 MWh to a single retail commercial customer or sell products to a Marketplace Customer. As such, this step is not applicable and was not performed.

- 14. If the Participant sold a certified REC product to a large customer or Marketplace customer, confirm that the date of sale is listed in the corresponding retail sales table. If the Participant sold a certified electricity product (competitive electricity or utility green pricing program) to the customer, confirm that the contract date of electricity sale is accurately represented on the corresponding retail sales table. Unless the certified retail product is sold under a multi-year contract, the date of sale must cover at least a portion of calendar year 2012. For multi-year contracts, check that the contract covers 2012. Note any exceptions.

Step III.3.14 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not sell more than 100,000 MWh to a single retail commercial customer or sell products to a Marketplace Customer. As such, this step is not applicable and was not performed.

- 15. If there is data on the "LEED Customer Data" table, check internal records against total number of LEED customers (certified green buildings) and aggregate MWh sold to customers per state of customer location. Note any exceptions.

Step III.3.15 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted there is no information provided for LEED customers. As such, this step is not applicable and was not performed. For RY2012, compliance with this step is optional for the Participant.

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Agreed Upon Procedures for the Section (Continued)

16. Check that in aggregate Marketplace, large customer and LEED customers and MWh per state is less than or equal to the corresponding state information on Non-Residential sales for the certified product. Note any exceptions.

Step III.3.16 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not have any Marketplace, large customer, or provided information for LEED customers. As such, this step is not applicable and was not performed.

#### Sales by Distributors Other than Participant

This section applies only to Green-e Energy Participants selling certified electricity products that are also being sold through one or more distributors (such as spokes in a hub-and-spoke arrangement, co-ops or other sales channels) other than the Participant.

17. Obtain internal records showing sales of certified products by Participant and their distributor utility(ies).

Step III.3.17 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not have retail sales of products through distributor utilities. As such, this step is not applicable and was not performed.

18. Verify that the sales of each product in in the Distributor Spreadsheet match Participant's internal records of product sales through each distributor utility. Note any exceptions.

Step III.3.18 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not have retail sales of products through distributor utilities. As such, this step is not applicable and was not performed.

19. Verify that the totals in the Distributor Spreadsheet match the totals for the corresponding product sales reported in the Non-Residential and Residential Sales tables. Note any exceptions.

### 3. Green-e Energy Certified Retail Sales (Continued)

#### Sales by Distributors Other than Participant (Continued)

19. (continued)

Step III.3.19 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not have retail sales of products through distributor utilities. As such, this step is not applicable and was not performed.

20. Verify that the total sales all of products listed on the Distributor Spreadsheet matches the sum of the same products' total sales in the Retail Sales table. Note any exceptions.

Step III.3.20 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not have retail sales of products through distributor utilities. As such, this step is not applicable and was not performed.

#### Additional Auditor Comments on Retail Sales

None.

### 4. Special Cases

#### Software Pages Needed for These Steps

- Special Cases: Audit Participant Data>>View Participant's Data>>Special Cases
- Facility Information Table: Audit Participant Data>>View Participant's Data >>Supply
- Wholesale Details tables: Audit Participant Data>>View Participant's Data >>Wholesale Sales>>Wholesale Details
- RGGI table: "Regional Greenhouse Gas Initiative (RGGI)" table on Audit Participant Data>>View Participant's Data >>Special Cases
- Supply from RGGI: "Supply from RGGI States" table on Audit Participant Data>>View Participant's Data >>Special Cases
- All above tables area also accessible on the "View All" page, Audit Participant Data>>View Participant's Data>>View All

#### 4. Special Cases (Continued)

##### Agreed Upon Procedures for the Section

##### New York Facilities

1. Check Audit Participant Data>>View Participant's Data >> Special Cases for facilities located in New York from which the Participant purchased RECs and the underlying null electricity was sold on the wholesale spot market, based on the "If Seller is providing only RECs..." field in the Generator Attestation. If any such facilities listed are listed in Special Cases, then obtain from the Participant a Conversion Transaction confirmation document from the New York Public Service Commission. Check that the NY facilities and MWh volumes from the Facility Information table are listed on the Conversion Transaction form. If Participant is not able to supply one at that time, note the date by which the Participant expects to be able to provide one. Note any exceptions.

Step III.4.1 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in New York. As such, this step is not applicable and was not performed.

##### Michigan Facilities

2. Note whether any facilities are located in Michigan. For all facilities located in Michigan that are not identified in the Facility Information table as being tracking in the Michigan Tracking System (MIRECS), check MIRECS to confirm that facility is not registered using the following URL: <https://portal1.mirecs.org/myModule/rpt/myrpt.asp?r=111>. For all facilities located in Michigan, the Participant must note whether and how many incentive renewable energy credits (IRECs) were or will be retired to support sales of MI generation. The Participant must provide Tracking System Reports and/or other documentation substantiating that the appropriate number of IRECs have been retired. A description of IRECs is in Appendix A.4 of the Green-e Energy National Standard. Review the Michigan form in Audit Participant Data>>View Participant's Data >>Special Cases and confirm that the form is filled out completely, references all Michigan facilities from the Facility Information Table (Audit Participant Data>>View Participant's Data >>Supply), and is signed. Note any exceptions.

Step III.4.2 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted no facilities located in Michigan. As such, this step is not applicable and was not performed.

#### 4. Special Cases (Continued)

##### Verification of Sales of RGGI MWh

##### Applicability and Intent

This section applies to Participants that made retail Green-e Energy certified sales of renewable MWh generated in Regional Greenhouse Gas Initiative ("RGGI") states, which are Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey (second half 2011 generation only), New York, Rhode Island and Vermont. The intent is to verify that the specific rules for sales of RGGI state renewable MWh were met, and that certain reporting to RGGI state environmental oversight bodies were made or will be made.

##### Background and Important Reminders for the Section

- Appendix C contains background on RGGI rules, as well as contact information for each RGGI state, in case questions on a specific state's reporting requirements arise.

##### Agreed Upon Procedures for the Section

##### 3. Obtain from Participant:

- Participant company billing statements for customers located in RGGI states, which may include invoices to customers, evidence of paid invoices, and/or delivery receipt letters
- Tracking System Reports that show retirement of the MWh used in certified retail sales
- all reports submitted to RGGI state environmental oversight bodies to substantiate sales into those RGGI states
- responses from RGGI state environmental oversight bodies responding to receipt and review of submitted reports, if responses have been received.

Step III.4.3 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

4. Referencing the leftmost three columns of the second page of Table C2 in Appendix C, verify that the first operation date and resource type (on the Facility Information table) are eligible for use toward sales into the state listed in the RGGI table. The "Resource Eligibility Differences from National Standard" column in Table C2 calls out resources that are eligible in the RGGI state of sale listed, but are not eligible for use in Green-e Energy certified sales, and lists instances in which the RGGI state's rules are stricter than Green-e Energy's. Note any exceptions.

#### 4. Special Cases (Continued)

##### Agreed Upon Procedures for the Section (Continued)

4. (continued)

Step III.4.4 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

5. Note as an exception any occurrences of "Delaware" or "DE" as the state of sale in the RGGI table.

Step III.4.5 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

6. Referencing the information Participant used to complete the RGGI section, verify that the number of MWh sold to each customer in a RGGI state matches the corresponding sales information, and verify that all sales of RGGI state generation to customers in RGGI states are represented on the Supply from RGGI table. Note any exceptions.

Step III.4.6 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

7. For each row listing "Maine", "ME" "New Hampshire" or "NH" as the state of sale, confirm that "NE-GIS" or "PJM-GATS" were used for the corresponding supply facilities in the Facility Information table. Note any exceptions.

Step III.4.7 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

#### 4. Special Cases (Continued)

##### Agreed Upon Procedures for the Section (Continued)

8. Note any facilities listed in the Wholesale Details tables (Audit Participant Data>>View Participant's Data>>Wholesale Sales>>Wholesale Details) that are in a RGGI state. Only retail sales can be Green-e Energy certified. Wholesale sales from generation from a RGGI state cannot be certified, however wholesale sales of NJ generation from January 1, 2012 and beyond can be certified.

Step III.4.8 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

9. Check that the entries in the RGGI table and Supply from RGGI table match applicable RGGI state reports that Participant has submitted to RGGI state environmental oversight bodies. Note if any responses from RGGI state environmental oversight bodies responding to receipt and review of submitted reports have been received; if they have been received and are not included with the RGGI state letters uploaded into the software system, include scans of those at the end of the Agreed-Upon Procedures Report.

Step III.4.9 was performed: ☐ Yes. ☐ No. ☒ N/A.

Exceptions, Notes, Reason for "No" or "N/A":

We noted that the Participant did not make any retail Green-e certified sales of renewable MWh generated in RGGI states in RY2012 to customers located in RGGI States. As such, this step is not applicable and was not performed.

##### Additional Auditor Comments on Special Cases

None.

We were not engaged to, and did not perform an examination, the objective of which would be the expression of an opinion on the compliance with the annual reporting requirements of the Center for Resource Solutions' Green-e Energy program. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to Marin Energy Authority and Center for Resource Solutions.

This report is intended solely for the use of the specified users listed above and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purposes.

A handwritten signature in black ink that reads "SingerLewak LLP". The script is cursive and fluid, with the letters "Singer" and "Lewak" connected together, and "LLP" written separately to the right.

SingerLewak LLP

San Jose, California  
June 28, 2013



I declare that I am qualified to perform the Green-e Energy audit, as I am (check one):

☒ an external auditor and CPA; or

☐ working for the Company and am a Certified Internal Auditor (CIA) in good standing with the Institute of Internal Auditors.

Based on the Green-e Energy Audit Protocol and the results of the Agreed-Upon Procedures, SingerLewak LLP asserts that the Company has:

☒ NO EXCEPTIONS with regard to its compliance of the Green-e Energy verification reporting requirements put forth in the Annual Verification Instructions and Annual Verification Protocol; or

☐ EXCEPTIONS with regard to its compliance of the Green-e Energy verification reporting requirements put forth in the Annual Verification Instructions and Annual Verification Protocol, and these exceptions are listed in the Agreed-Upon Procedures Report.



\_\_\_\_\_  
Signature

\_\_\_\_\_  
Stephen P. Carter, CPA  
Printed Name

\_\_\_\_\_  
June 28, 2013

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Partner

\_\_\_\_\_  
Title

## **SUPPLEMENTARY INFORMATION**

## **APPENDIX A**



## APPENDIX G: GREEN-E ENERGY ATTESTATION FROM PROGRAM PARTICIPANT

Reporting Year: 2012

I, (print name and title) Dawn Weiss Executive Officer, declare on behalf of (name of renewable energy product provider) Marin Energy Authority ("Participant"), that:

- 1) all the renewable megawatt-hours (MWh) sold through my company's Green-e Energy certified renewable energy product(s) were generated by eligible renewable energy generators as defined in the Green-e Energy National Standard;
- 2) all transactions made in 2012 that were advertised, represented, or otherwise disclosed as Green-e Energy certified are represented in my company's RY2012 verification submission.
- 3) all the renewable attributes, including any emissions avoidance, reductions or claims and all CO<sub>2</sub> benefits, represented by the Green-e Energy certified product(s) sold in the Reporting Year indicated above, reported in the Green-e Energy verification submission for that Reporting Year, and verified through the Green-e Energy Annual Verification Protocol were transferred to customers or retired on their behalf and were not sold separately to other customers or used to make other renewable energy claims;
- 4) the renewable MWh reported for Green-e Energy certified sales were sold once by Participant as part of a Green-e Energy certified product;
- 5) Participant made no specific purchases and/or generation of energy that has already been claimed, including claims inadvertently made through generator advertizing stating where renewable generation will be delivered;
- 6) all required reporting to state agencies (such as reporting for Regional Greenhouse Gas Initiative state sales, New York Conversion Transactions, or notification letters to Public Utility Commissions and other entities, as applicable) were submitted to the appropriate agencies in accordance with Green-e Energy and such agencies' rules, or will be submitted to the appropriate agencies if the applicable deadline has not passed at the time of signature of this Participant Attestation, and responses from such agencies will be provided to CRS in accordance with Green-e Energy verification requirements;
- 7) all electricity paired with RECs and sold as renewable electricity had emissions rates at or below Participant's system mix emissions rates for the year of sale;
- 8) no specific purchases and/or generation of nuclear power contributed to the certified products;
- 9) for the renewable MWh sold by Participant, Participant:
  - a) did not sell, market or otherwise represent as renewable energy the electrical energy that was generated with the reported RECs; and

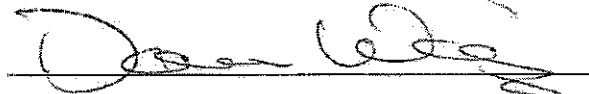
- b) did not use the electrical energy that was generated with the reported RECs to meet any federal, state or local renewable energy requirement, renewable energy procurement, renewable portfolio standard, or other renewable energy mandate.

To best of my knowledge, no other party participated in the actions described in a, and b above with the electrical energy that was generated with the RECs claimed by Participant

Names of Green-e Energy certified products:

• Deep Green	•
•	•

I further declare that statements contained in documentation provided to Green-e Energy for the products listed in the table above as part of RY2012 verification reporting are true and correct, and that the MWh claimed for the verified products were sold once and only once. Further, the eligible renewable MWh sold through Green-e Energy certified products offered by Participant did not contribute to any mandated renewable portfolio standard or other mandated renewable energy program. I authorize CRS staff to disclose certified transaction information to relevant government, semi-government, and state utility, energy, and environmental oversight bodies for the purposes of notifying such bodies that such transactions were made in the voluntary renewable energy market and should not be counted toward state or other renewable energy mandates or other relevant mandates. As an authorized agent of the aforementioned Participant company, I have authority to submit this report and attest to the statements on this form on the company's behalf

  
Signature

6-28-13  
Date

San Rafael, California  
Place of Execution

This form is used by the Center for Resource Solutions to verify the accuracy of claims made by Participants in Green-e Energy. Except for the uses authorized above, namely verification by Green-e Energy and the protection of the voluntary renewable energy market, the information on this form is held strictly confidential and will not be shared with any other party except in aggregate form, except for such uses authorized by this form.

# MCE Expansion and Ratepayer Impacts

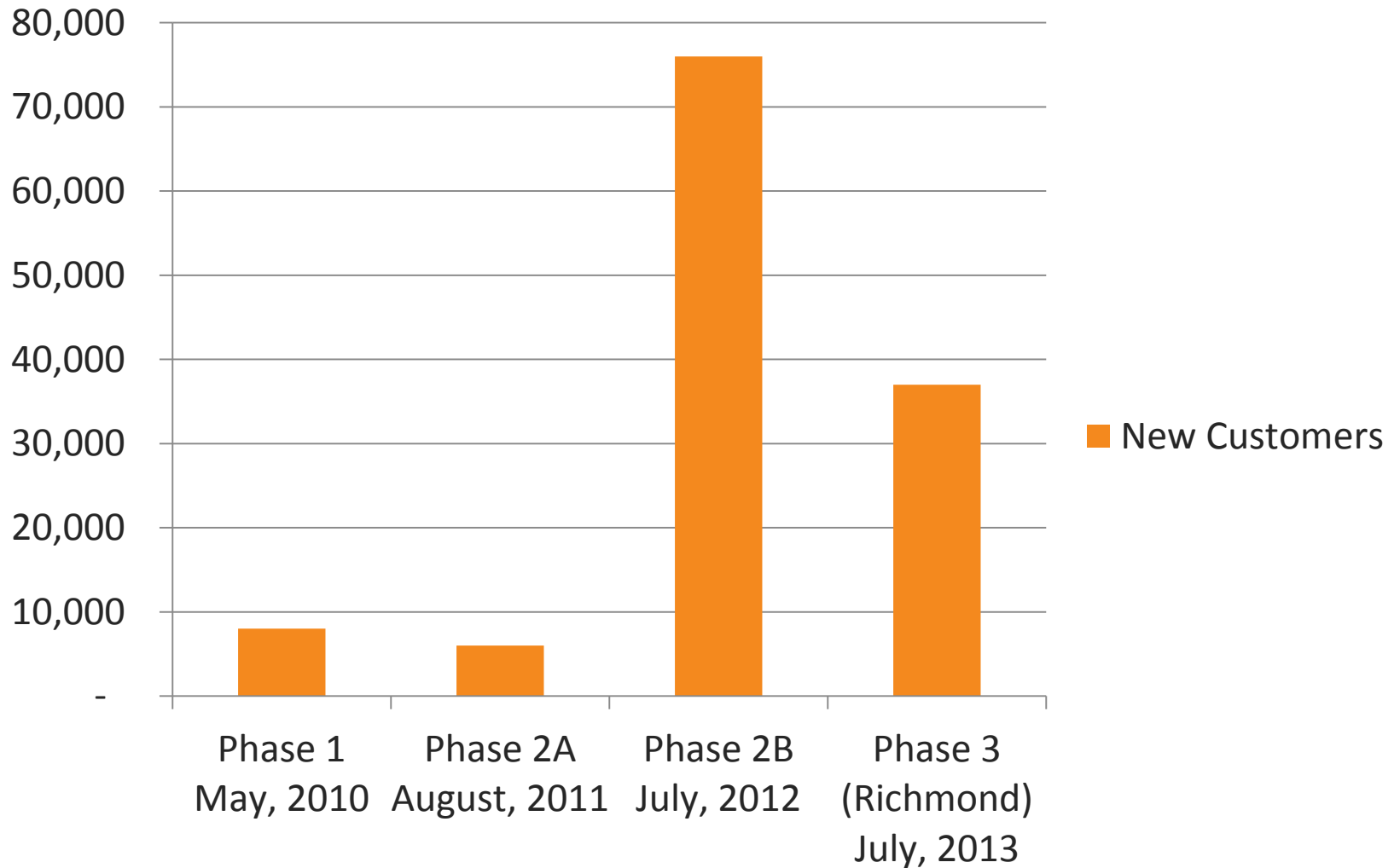


August 12, 2013

# Introduction

- Expansion of MCE service to new communities involves several policy issues: political/governance, economic, environmental and strategic.
- Focus of this presentation is on estimating expansion's direct economic benefits to MCE ratepayers from increasing program sales.
- The specific benefits and costs of a contemplated expansion would be determined through a more detailed applicant analysis.

# MCE Expansion History





# Expansion Experience

- Expansion within the PG&E service territory is operationally straightforward as protocols are well-defined for enrollment of additional customers – expansion to SCE or SDG&E territory would be more challenging.
- Primary workload increases are related to the initial electric procurement, update of Implementation Plan, communications, and customer service (e.g., opt out processing, enrollment and billing).
- Lessons learned from Phase 2B expansion, particularly in communications and opt-out processing, were applied successfully to Richmond.

# How Can Expansion Benefit MCE Ratepayers?

- Greater scale efficiencies can reduce MCE program costs and help reduce customer rates.
- Additional electric purchases can reduce average power supply costs if lower cost power is available in the market.
- Growth through expansion offsets customer attrition that might otherwise result in a slow decline.
- Expansion can enhance MEA credit standing as continuing customer/member growth signals health and competitive success.

# Estimated MCE Rate Benefits

Source of Rate Benefit	Impact	Est. Rate Impact for +20% Load Growth	Est. Rate Impact for +100% Load Growth
Fixed costs spread over larger sales base	Small rate benefit because these fixed costs represent only about 5% of MEA budget	Approx. 1% reduction	Approx. 3% reduction
Incremental market purchases may reduce average power supply cost	Depends on market at time of expansion; Currently a modest benefit because MEA supply cost is close to market; could be a detriment if market power prices are increasing	Approx. 1% to 2% reduction	Approx. 2% to 5% reduction
<b>Total</b>		<b>2% to 3% reduction</b>	<b>5% to 8% reduction</b>

# Expansion Process for Phase 3

1. Expansion criteria established
2. Member application/fee agreement
3. Applicant analysis
4. Board approval
5. Implementation Plan update
6. Electric procurement
7. Communications/outreach
8. Enrollment

# Questions?



# Group Solar Purchasing Program



# Overview

“MEA anticipates increasing NEM participation to approximately 20,000 KW (20 MW) over the next ten years. During the planning period, management will periodically evaluate MEA’s NEM program to balance the achievement of MEA’s long-term distributed generation goals and related impacts to MCE electric rates.” (Integrated Resource Plan, Nov. 2012)

- How much distributed generation does MCE have in its service territory?

Location	# of installations	Total capacity (MW)
Marin	2839	18.582
Richmond	483	7.773
Total	3322	26.355

Source: PG&E EGI Interconnection Report 5.7.13

- How much of this distributed generation can be attributed to MCE customers?

Location	Percentage of NEM accounts enrolled in MCE	Estimated capacity (MW) of NEM accounts enrolled in MCE
Marin	89%	16.5
Richmond	99%	7.7
Total	90%	24.2

Estimate based on Noble’s Snapshot 7.1.13

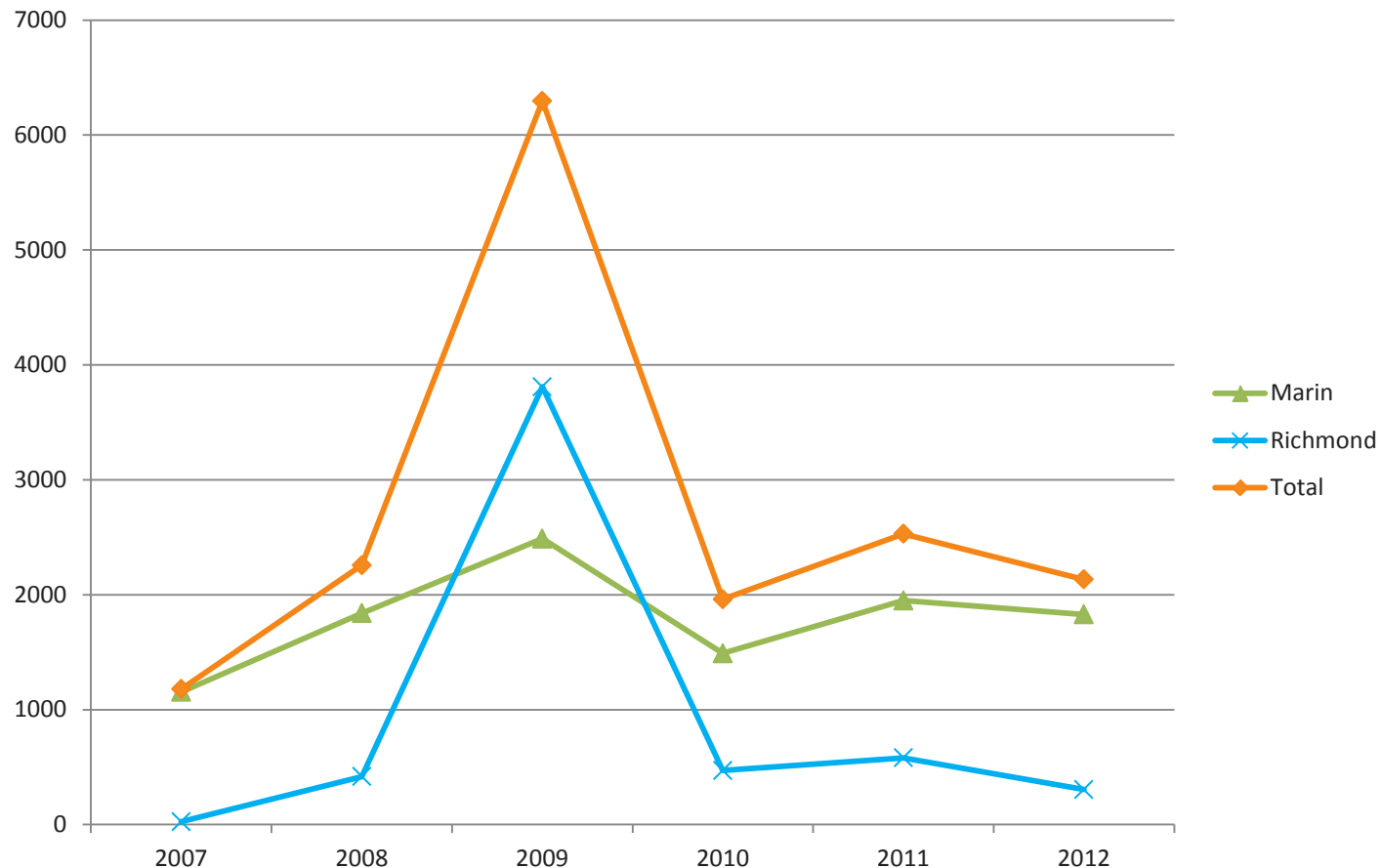
# MCE NEM Customers By Rate Schedule

Sector	Noble - MCE NEM Accounts		CSI - MCE Service Territory NEM Accounts		
	# of accounts	% of total	# of accounts	% of total	Ave system size (KW - CEC PTC)
RES-1	1108	44.44			
RES-6	612	24.55			
RES-7	542	21.74			
RES-8	27	0.01			
RES-9	21	0.84			
<b>Residential Total</b>	<b>2310</b>	<b>92.65</b>	<b>1835</b>	<b>93.34</b>	<b>4.88</b>
COM-1	61	2.45			
COM-6	94	3.77			
COM-10A	14	0.56			
COM-10P	1	0.04			
COM-10S	7	0.28			
COM-19P	3	1.20			
COM-19S	1	0.04			
COM-20P	1	0.04			
<b>Commercial Total</b>	<b>183</b>	<b>7.34</b>	<b>66</b>	<b>3.36</b>	<b>54.57</b>
<b>Government/Non-profit</b>			<b>65</b>	<b>3.31</b>	<b>72.39</b>
Total	2493		1966		

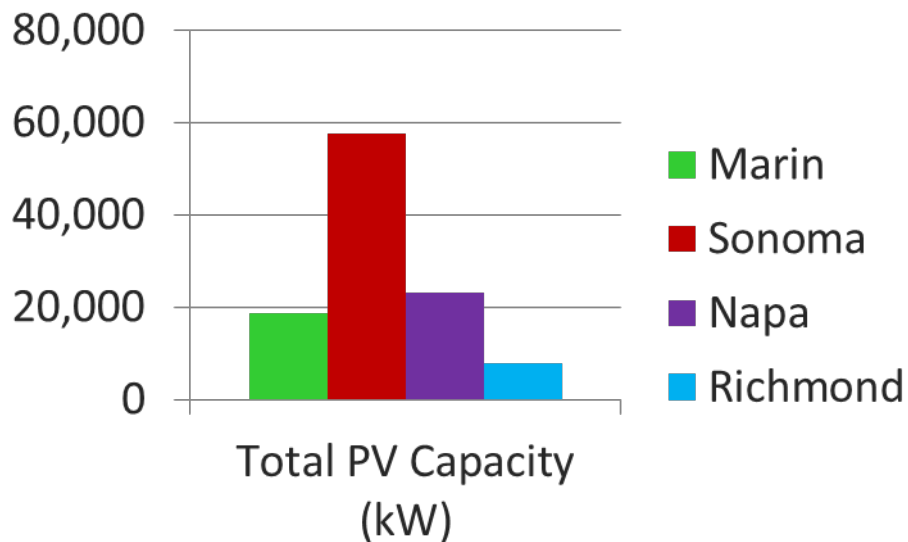
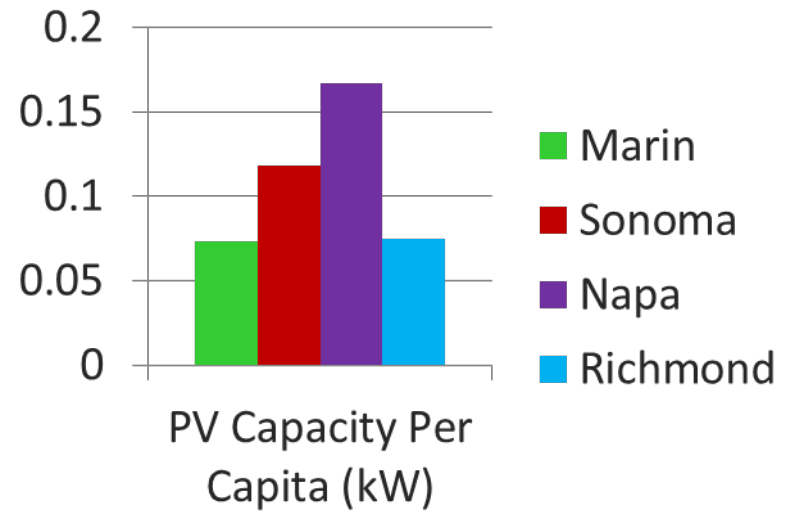
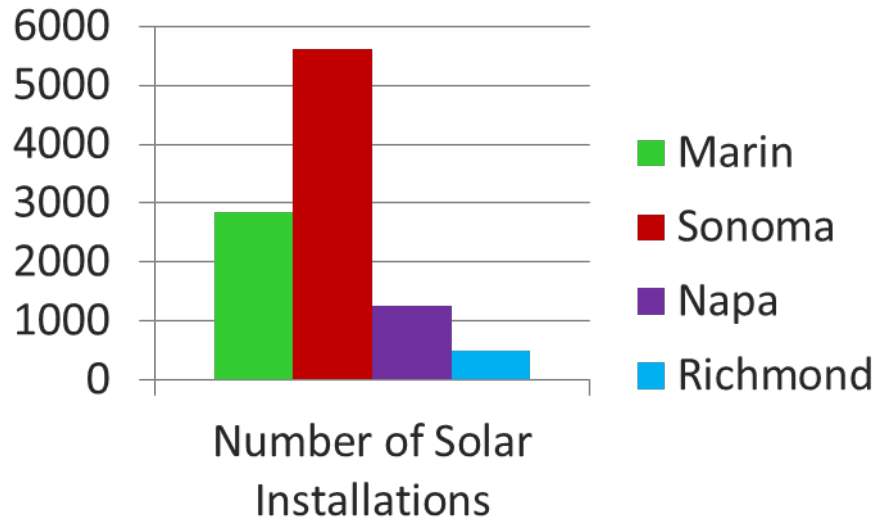


# Installation Rate

- From 2007-2012 the installation rate for distributed generation in MCE's service territory has been roughly 2.7MW/year



# Comparison to Neighboring Communities



# How can MCE support DG?

How does/could MCE encourage distributed generation projects?

- Improve the ROI for solar through generous NEM program
- Encourage a standard permitting process and reduced permitting costs throughout service territory
- Act as a trusted, neutral messenger to provide information and encourage adoption
- Provide competitive financing for solar
- Reduce third party financing risk by locking in NEM rates for a set period of time
- Add value (ie, through additional, ongoing home energy services)

# Streamlining the Permitting Process

- Encourage a standard permitting process and reduced permitting costs throughout service territory

**SOLAR PERMITTING SCORECARD**

**SAN RAFAEL, CA**

1. Posts requirements online?	☒
2. Enables online processing?	☒
3. Fast turn around time?	☀
4. Reasonable permitting fees?	☒
5. No community specific licenses needed?	☀
6. Offers a narrow inspection appointment window?	☒
7. Eliminates excessive inspections?	☀

**GOOD**




**SOLAR PERMITTING SCORECARD**

**TIBURON, CA**

1. Posts requirements online?	☒
2. Enables online processing?	☒
3. Fast turn around time?	☀
4. Reasonable permitting fees?	☒
5. No community specific licenses needed?	☀
6. Offers a narrow inspection appointment window?	☀
7. Eliminates excessive inspections?	☀

**GOOD**



# Existing Solar Purchasing Programs

Year	Name	Customer Sector	# of participants	KW Installed	Average base cost (\$/watt)	Price Reduction (%)
2007	GoSolarMarin	Residential	100	300		
2008	SV-REP (Santa Clara County)	Municipal	9 local govts.	14400		12
2009	Solarize Portland	Residential	130	350		36
2011	SunShares (San Jose)	Residential (city employees)	29	140	4.42	
2011, 2012	Solarize Washington	Residential, Small Commercial	244	1081		
2011	Solarize Mass	Residential, Small Commercial	162	829		
2012	Solarize Mass	Residential, Small Commercial	803	5100	3.91	14
2012	Milwaukee Power Pack	Residential	10	28		
2012	Solarize Connecticut	Residential	300	2300		
2012	Solar@Work (San Francisco)	Small Commercial	5	157	4.25	
2013	SEED (Marin, Napa, Sonoma)	Municipal				

# Spectrum of Potential Partnership Opportunities

One to One

One to Many

Co-branded one to one partnership

Multiple partners (one vendor per tranche)

Multiple partners

Short list of qualified vendors

Hosted marketplace

**SOLAR HOMES** Explore, enjoy and protect the planet 

HOME LEARN ABOUT SOLAR TESTIMONIALS

 **SUNGEVITY**  
GENERATE POSITIVE

 **SIERRA CLUB**  
FOUNDED 1892

Request a free solar iQuote to see what solar could do for you and your home.

Your Home Address  Street Address, City, S

**Go Solar with the Sierra Club.  
Get a \$750 cash gift card!\***

When you go solar with Sungevity and the Sierra Club, Sungevity gives you a \$750 cash gift card and gives another \$750 to support the Sierra Club.



**“** I'm very happy with my solar panels. The panel installation went flawlessly, and Sungevity does a good job monitoring and servicing the system. In the future I will see a net savings because utility costs will rise faster than my lease amount. I was also happy that Sierra Club got money back from Sungevity. **”**

—David S, California

**HOW MANY SIERRA CLUB HOMES HAVE GONE SOLAR?**

836



Make your home the next house on your block to go solar.

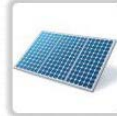
My Energy Tool - My Ener x

myenergytool.mccleanenergy.com/audit/get-started/segment/0

Energy Usage For New unit

[Get Started](#) [My House](#) [My Climate Control](#) [My Appliances](#) [Solar](#) [Bill History](#)

**Solar**

 Interested in solar power?  
Yes

Enter information on surfaces for the area that could likely support solar panels; preferably roof or open ground areas. Use the picture of your home below to assist you.

**Direction**

Which direction does the roof surface generally face? South or West are the most useful directions.

Southeast

**Roof Pitch**

Select angle of the roof surface.

Moderate - 30 degrees

**Roof Shading**


Select how much shading covers the area at mid-day.

Little

**Ownership Model**

Select the ownership model that you are interested in pursuing in order to receive competitive bids from solar vendors.

Lease



# Spectrum of Potential Partnership Opportunities

One to One

One to Many

Co-branded one to one partnership

Multiple partners (one vendor per tranche)

Multiple partners

Short list of qualified vendors

Hosted marketplace

Type	PROs	CONs
Co-branded partnership	<ul style="list-style-type: none"> <li>• Clear co-branding</li> <li>• Easier for vendor(s) to anticipate work load</li> <li>• More straightforward for customers</li> <li>• Easier to administrate</li> <li>• Straightforward pricing discount</li> <li>• Actions of vendor/installer reflect on MCE</li> </ul>	<ul style="list-style-type: none"> <li>• May anger non-selected vendors</li> <li>• Lack of choice for customers</li> <li>• Actions of vendor/installer reflect on MCE</li> </ul>
Multiple partners (1 per tranche)	<ul style="list-style-type: none"> <li>• Incentive for vendors to perform (eg, Sierra Club “beauty contest”)</li> <li>• Straightforward pricing discount</li> <li>• Actions of vendor/installer reflect on MCE</li> </ul>	<ul style="list-style-type: none"> <li>• No obvious tranches</li> <li>• Lack of choice for customers</li> <li>• May anger non-selected vendors</li> <li>• More difficult to administer</li> <li>• Less volume per vendor = smaller discount</li> <li>• Actions of vendor/installer reflect on MCE</li> </ul>
Short list	<ul style="list-style-type: none"> <li>• Open to all “qualified” vendors</li> <li>• Choices for customers</li> <li>• MCE less liable</li> </ul>	<ul style="list-style-type: none"> <li>• More staff time required</li> <li>• Less straight-forward experience for customers</li> <li>• Complicates tiered pricing discounts</li> <li>• More difficult to exert influence over customer experience</li> </ul>
Hosted marketplace	<ul style="list-style-type: none"> <li>• Least liability for MCE</li> <li>• Transparent marketplace</li> <li>• Choices for customers</li> <li>• Competitive bidding on a project by project basis</li> </ul>	<ul style="list-style-type: none"> <li>• Group discounts?</li> <li>• Lack of control over customer experience</li> </ul>



# Outlining the Process

Step	Customer	MCE	Vendor	Notes/Questions
First Contact	Customers are introduced to the program through outreach	MCE develops collateral (eg, bill inserts, HURs), hosts workshops, conducts outreach	Vendors participate in outreach activities	<ul style="list-style-type: none"> <li>Outreach could target high energy consumers</li> <li>How can community ties be used to spread the message? (Peer to peer technical assistance? Testimonials? Email lists?)</li> </ul>
Learning more	Customers review details of program offering (online)	MCE updates website & PEI tool w/ program details, links to vendors.	Vendors create landing page/portal for MCE customers.	<ul style="list-style-type: none"> <li>Assuming MCE has access to smart meter data, customers will be able to use PEI tool to compare ROIs under various rate schedules based on their usage profiles</li> </ul>
Technical Assistance	Customers have their questions answered			<ul style="list-style-type: none"> <li>What types of questions will MCE respond to and who will respond (ie, will MCE train CSRs to answer basic program questions)?</li> <li>Will MCE contract a third party to answer questions?</li> <li>What types of questions will vendors be expected to respond to?</li> </ul>
Solar assessment	Customers receive solar assessment			<ul style="list-style-type: none"> <li>Will MCE contract a neutral third party to conduct the assessments or will each vendor provide free solar assessments?</li> <li>Will solar assessments be conducted in person? Through the PEI tool? Over the phone?</li> </ul>
Bids	Customers receive quotes for the project			<ul style="list-style-type: none"> <li>Will customers solicit bids through MCE, through an MCE intermediary, or from each vendor separately?</li> <li>Will MCE require all vendors to agree to a single offering or will each vendor provide the customer with their unique standard bid?</li> </ul>
Signing a contract	Customers select a solar vendor and ownership model (ie, direct purchase, PPA, lease)			<ul style="list-style-type: none"> <li>Under a tiered pricing scenario, customers would be quoted an initial “no more than” price and then potentially receive a rebate at the conclusion of the enrollment period (pending the ultimate # of customers contracted/kw installed)</li> <li>Are we interested in a tiered pricing model?</li> <li>Will thresholds for pricing tiers be program wide or by vendor?</li> <li>Will there be higher rebates for early adopters? (Could the twenty \$500 MCE solar rebates be used to reward early adopters?)</li> </ul>



# Outlining the Process (continued)

Step	Customer	MCE	Vendor	Notes/Questions
Installation			Vendors (or sub-contractors) install panels	
Paperwork		MCE issues solar rebate (if available), receives RECs	Vendors help customers apply for rebates (MCE, CSI), register/transfer RECs	
Monitoring	Customers are able to monitor the output of their panels (in real time?), and clearly see the environmental and \$ value of their systems			<ul style="list-style-type: none"> <li>• Will MCE or vendors be responsible for providing/hosting site where customers can monitor their production?</li> <li>• Can PEI include analytics in dashboard tools?</li> <li>• Is there a way to incorporate HAN devices into the Solarize program?</li> <li>• Is there an opportunity for public monitoring (eg, real time monitoring of the aggregate production from the Solarize program on the MCE website)?</li> <li>• Would it be possible to publicly display output (eg, through a live video screen at a mall)?</li> </ul>
Reporting			Vendors provide regular reporting (weekly sign-ups, installations, etc)	

# Potential Benefits & Concerns of a Group Purchasing Program

## Benefits

- Would reduce resource adequacy requirements
- PV production should flatten load, resulting in reduced procurement costs
- Would reduce GHG emissions
- Local job creation
- Improved economics for solar customers
- Potential use of RECS in MCE supply portfolio

## Concerns

- Reduced Revenue
- Administrative costs
- Third party costs
- Liability
- Solar vendor relationships

# NEM's effect on MCE's revenues

Rate Schedule	# of NEM Customers	Average Annual Anticipated Revenue Per Customer (w/out solar)	Average Annual NEM Customer Balance	Total Annual NEM Payout	Total Annual Costs (Anticipated Revenue – Actual Revenue - Payout)
RES-1	1108	\$451	\$136		\$349,876
RES-6	612	\$526	\$(32)	\$19,584	\$341,496
RES-7*	542	\$696	\$(217)	\$117,614	\$494,846
RES-8	27	\$587	\$127		\$12,420
RES-9	21	\$590	\$53		\$11,277
COM-1	61	\$1,008	\$206		\$48,922
COM-6*	94	\$4,075	\$(499)	\$46,906	\$429,956
COM-10A	14	\$11,758	\$2,540		\$129,052

\*PG&E has proposed significant changes to E-7 and A-6 rates in their 2014-16 General Rate Case that would dramatically reduce peak rates while increasing off-peak rates.

# Summary

- MCE has already exceeded it's 2020 goal of 20 MW of distributed generation
- If there is continued interest in encouraging DG, MCE might consider administering a solar group purchasing program
- Next steps would include:
  - Finalizing a partnership model
  - Clarifying MCE's administrative role and associated budget
  - Further evaluating program costs and benefits
  - Finalizing a solicitation document
- Is there interest in continuing to explore a group solar purchasing program?
- Is additional information needed before moving forward?

# Questions?

