



PG&E Residential AC Quality Care Rebate Program

Exhibit B: Contractor Handbook



*Pacific Gas and
Electric Company*[®]

AC Quality Care Rebate Program

**Help your customers
get the most value from their
Central AC and Heat Pump systems
with PG&E Rebates.**



Contractor Handbook

January 2017

Version 4.1

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Welcome AC Quality Care Participants!

PG&E's AC Quality Care Program (Program advances energy efficiency and resource conservation through upgrade and regular maintenance of residential Heating, Ventilation & Air Conditioning (HVAC) systems.

As a Participating Contractor, you are critical to this Program. It's your expertise that allows Customers to make their HVAC systems more energy efficient and helps the State facilitate the transformation of the "**energy efficiency and peak load reduction in the California climate**"¹.

AC Quality Care will also help you—by providing ways to market new services to existing clients, generate leads, and grow your business in a sustainable, energy-efficient marketplace.

This handbook provides you with information about the Program, guidelines on becoming a Participating Contractor, and the processes you need to follow to perform the AC Quality Care Services offered. This handbook is a complement to the guidelines provided in the Contractor Participation Agreement (CPA) and is also a supplement to the Customer Rebate Application and Contractor Training materials.

THE CONTRACTOR HANDBOOK IS A WORKING DOCUMENT. PG&E RESERVES THE RIGHT TO UPDATE, CHANGE AND/OR REVISE THE DOCUMENT TO CLARIFY PROGRAM RULES AND REQUIREMENTS AT ANY TIME DURING THE TERM OF THE PROGRAM. THE CURRENT VERSION WILL BE AVAILABLE ON THE AC QUALITY CARE CONTRACTORS' WEBSITE AT WWW.ACQUALITYCAREBATE.COM.

This Program is funded by California Utility Customers and administered by PG&E under the auspices of the California Public Utilities Commission (CPUC).

TIP: If you are viewing this handbook in Adobe Acrobat, you can find topics by looking for key words: press Ctrl + F or select "Find" in the Edit menu to bring up the search box, type the word you are looking for and press the right or left arrows to search forward or back.

¹ California Long Term Energy Efficiency Strategic Plan (September 2008)

Table of Contents

1	About the Program	8
1.1.	Program Funding and Oversight	8
1.2.	Program Design	8
1.3.	Contractor Participation	9
1.4.	Rebates	9
1.5.	Program Implementer	9
2	Contractor Enrollment Process	10
2.1.	Contractor Participation Agreement (CPA)	10
2.1.1.	Enrollment Review Process	10
2.1.2.	Program Training Requirements	10
2.1.3.	Participating Contractor Status Classifications	10
2.2.	Contractor Conduct and Public Relations	12
2.3.	Participating Contractor Team Roles and Responsibilities	12
2.4.	Contractor Tools & Equipment	13
2.4.1.	Tools & Supplies	13
2.4.2.	Recommended Instruments	13
2.4.3.	Measurement Instruments Accuracy Specifications and Calibration Intervals	15
3	Contractor Program Training	16
3.1.	Training Curriculum	16
4	Customer Eligibility	17
5	Rebate Details	18
5.1.	Program Rebate Requirements	18
5.2.	Rebate Details for AC Quality Care Measures	19
6	Steps for Performing ACQC Program Services	20
6.1.	Performing the ACQC Assessment	20
6.1.1.	SAMobile (My Service Assistant Mobile) Software	20
6.1.2.	Customer Rebate Application	21
6.1.3.	“What to Expect” Leave-Behind	22
6.1.4.	Program Stickers	22
7	Application Submission Process	22
7.1.	ACQC Assessment and Repair Checklist	23
7.2.	Customer Rebate Application	23
7.3.	Customer Invoices	23
7.4.	ACQC Contractor Portal	23

7.5. The Repair	24
7.5.1. Final Report to Customer	24
7.6. One-Year Quality Maintenance Agreement	24
8 Quality Assurance / Quality Control	25
8.1. Quality Assurance and Quality Control Standards and Procedures	25
8.1.1. Contractor Eligibility and Enrollment	25
8.1.2. Customer Rebate Measures Application	25
8.1.3. Customer Rebate Measures Installation	25
8.1.4. Quality Assurance Phone Questionnaire	25
9 Customer Satisfaction	26
9.1. Satisfaction Survey	26
9.2. Issues Resolution	26
10 Program Marketing – Getting Customers	27
10.1. Marketing Support	27
10.1.1. AC Quality Care Program and PG&E Websites	27
10.1.2. PG&E Customer Brochure and Door Hanger	27
10.2. Customer Collateral Guidelines	28
10.2.1. Pacific Gas and Electric Company (PG&E):	28
10.2.2. AC Quality Care:	28

Table of Figures

Figure 1: Location of SAID on PG&E Bill	17
Figure 2: Sample Program Sticker	22
Figure 3: Residential HVAC Quality Maintenance Service Workflow	24

List of Tables

Table 1: Summary of the AC Quality Control Program Design	9
Table 2: Contractor Status Definitions.....	11
Table 3: Program Team Roles & Responsibilities	12
Table 4: Measure Variables, Accuracy & Calibration Internal Details	15
Table 5: Program Course Descriptions	16
Table 6: Rebate Details for AC Quality Care Measures	19
Table 7: Program Services: Assessment, Repairs & Retrofits and Service Agreement	20
Table 8: AC Quality Care Correct Terminology	28

1 About the Program

AC Quality Care (ACQC) is a rebate program aimed at improving the operation of heating, ventilation, and air conditioning (HVAC) in homes. This handbook will guide you through:

- ✓ Contractor Enrollment
- ✓ Program Training
- ✓ Customer Eligibility
- ✓ Rebates Details
- ✓ Steps for Performing Program Services
- ✓ Rebate Application Submission
- ✓ Quality Assurance/Quality Control Basics
- ✓ Program Marketing

Some of these topics are covered in greater detail in other Program documents, which will be made available to you and your staff. Build It Green (BIG) will work with you to make sure you have all the necessary information to participate in AC Quality Care.

The Program is based on the relevant components of the Air Conditioning Contractors of America ([ACCA Standard 4](#): Maintenance of Residential HVAC Systems – Residential Heating, Ventilation, and Air Conditioning Applications for One- and Two-Family Dwellings of Three Stories or Less ([ACCA 4](#)), a nationally recognized industry standard. The Program emphasizes a comprehensive approach to maintaining and improving the operation of residential HVAC units.

ACCA 4 specifies the minimum service required to qualify as Quality Maintenance (QM) to preserve a system's ability to achieve acceptable thermal comfort, energy efficiency, and indoor air quality.

1.1. Program Funding and Oversight

The CPUC adopted several strategies aimed at eliminating market barriers and transforming the market for energy efficiency. HVAC is one of the industries targeted due to the intensive energy use attributed to these systems in homes. The CPUC included specific goals for energy efficiency in HVAC in the California Long Term Strategic Plan. Subsequently, the Western HVAC Performance Alliance crafted a California HVAC Roadmap to achieve goals set out in the Strategic Plan. These efforts resulted in the development of the AC Quality Care Program which aimed at addressing the overall maintenance of systems. The Program is approved through the end of 2017.

1.2. Program Design

PG&E and its affiliates have worked together to develop a Program that is simple to follow and is intended to optimize the performance of residential HVAC units. The following is a walk-through of the core processes step-by-step:

Table 1: Summary of the AC Quality Control Program Design

PG&E AC Quality Care Program	
AC Quality Care Program Goal: Getting customers to invest in improving and maintaining their HVAC system.	
Contractor Qualification & Training	Participating Contractors that meet PG&E qualifications are trained in ACCA Standard 4 Quality Maintenance (QM) and the PG&E AC Quality Care Program promotion and processes.
Assessments & Recommendations	Participating Contractors provide customers with a comprehensive Assessment of their HVAC needs and system and give the customer a written estimate of the recommended QM work.
Repair & Retrofit Services	With customer approval, Participating Contractors perform the recommended QM work per ACCA 4 Standards.
Application for Rebates	Participating Contractors help the customers complete the Rebate Application and any other forms required and submit them on the Customer's behalf to the ACQC Contractor Portal. Rebates help defray the cost of energy efficiency treatments.
Quality Assurance & Quality Control	BIG provides Participating Contractors field and back office support, performs inspections for completed work, and helps resolve customer issues.
Rebates Issued	PG&E issues rebate checks for qualified measures. A sample of the rebate applications are verified by PG&E's Central Inspection Program (CIP).

1.3. Contractor Participation

The Program is open to contractors carrying a C-20 license and operating in PG&E service territory. As a Participating Contractor, you and your service technicians will receive training on ACCA 4 and other Program training necessary for participation. The Program will provide additional mentoring and training assistance to participate in the Program.

1.4. Rebates

The ACQC Program provides opportunities for customers to reduce the cost of maintenance measures through rebates offered by PG&E. Rebates up to \$625 are available for each system in a single family or duplex home. Additional information on the rebates can be found in Section 5.

1.5. Program Implementer

PG&E has contracted with Build It Green (BIG) to implement the AC Quality Care Program. Contact information for the Program are as follows:

Build It Green
300 Frank H. Ogawa Plaza, Suite 620
Oakland, CA 94612

Phone Number: (510) 306 - 2272(ACQC)
Email: acqualitycare@builditgreen.org

2 Contractor Enrollment Process

2.1. Contractor Participation Agreement (CPA)

The first step in becoming a Participating Contractor in the ACQC Program is to submit an online enrollment application through the AC Quality Care website enrollment page (www.acqualitycarerebate.com). You can also contact Build It Green via email at acqualitycare@builditgreen.org or by calling the Program Support Line at (510) 306-2272 (ACQC) to obtain a copy of the Contractor Participation Agreement (CPA). Within Exhibits C and D of the CPA, the following eligibility requirements are listed:

- ✓ Qualification Compliance
- ✓ Experience
- ✓ Location
- ✓ Technician Requirements
- ✓ License
- ✓ Background Checks
- ✓ Emergency Service

The CPA is required to ensure contractors have submitted all of the necessary paperwork needed to participate in the Program and they have met all of the Program requirements. This includes verifying that staff have the required certifications and licenses and the Participating Contractors have the required up-to-date business license and insurance coverage. Please refer to Exhibit C of the Contractor Participation Agreement for more information.

2.1.1. Enrollment Review Process

The BIG Team will review your CPA documents and determine whether you have met the enrollment application requirements. BIG will inform you of your approval notify you via email of next steps. Upon enrollment in the Program, you will be added to an email distribution list for announcements about training opportunities, Program updates, and related information. You will also be listed on the AC Quality Care website and you will be able to identify yourself as a contractor authorized to do work for the Program and help customers obtain rebates. Please refer to Section 10 on Program Marketing for information on appropriate ways you can identify yourself with the Program.

2.1.2. Program Training Requirements

Prior to submitting rebate applications, you and your staff participating in the Program will be required to complete Program-specific training. Please refer to Section 3 for detailed training information. Scheduled trainings are available online at www.ACQualityCareRebate.com.

2.1.3. Participating Contractor Status Classifications

BIG will oversee the work of Participating Contractors and perform Field Quality Control inspections based on your Program status classification. Your status is determined by your overall participation in the Program.

Table 2: Contractor Status Definitions

Contractor Status	Brief Definition	QC Inspection Summary and Application Submission Permissions
Enrolling	A contractor who has begun submission of enrollment paperwork	No applications are processed until a Provisional status is achieved.
Approved	All of the enrollment paperwork has been submitted and verified.	The contractor will be allowed to enroll technicians in Technical Training classes. No applications are processed until a Provisional status is achieved.
Provisional	A minimum of one technician has completed Technical Training and a minimum of one office staff has completed Operations Training.	<p>The contractor will be provided access to submit applications through the Contractor Portal.</p> <p>Five (5) sites with verifiable measures submitted by each technician will be chosen at random for a Quality Control (QC) inspection.</p>
Full Participation	A contractor whose technicians have successfully completed ten (10) applications, and have passed the required QC inspections with no discrepancies for “Provisional” status	All applications with verifiable measures submitted by the contractor will be subject to random field inspections at a level of no less than 5%.
Probationary	A contractor whose quality or integrity has been called into question and escalated for investigation	A minimum of five (5) sites with verifiable measures submitted by the contractor will be chosen at random for a Quality Control (QC) inspection.
Hold [Suspension]	A contractor whose actions have led to necessary escalation to PG&E and scheduled for a correction action meeting	Application submission permissions will be revoked until a resolution from the correction action meeting is reached.
Terminated	A contractor who has been unresponsive, uncooperative or failed attempts to fulfill the corrective action plan	Contract Manager will gain PG&E approval to proceed with removal of contractor from program. Application submission permissions are revoked.

2.2. Contractor Conduct and Public Relations

Treating PG&E customers properly is of the utmost importance to Build It Green and PG&E. Participating Contractors and their staff must respect the rights of the general public and PG&E Customers at all times. All Participating Contractors must ensure the conduct of their employees and subcontractors operate in a professional manner.

2.3. Participating Contractor Team Roles and Responsibilities

The following table describes the typical roles and functions of a Contractor’s employees that play a role in the Program. In many instances, multiple functions are performed by a single individual.

Table 3: Program Team Roles & Responsibilities

The Participating Contractor shall:	The Contractor Technician Shall:	The Contractor Back Office Shall:
<ul style="list-style-type: none"> ✓ Maintain required licenses, insurance, and other items required to be enrolled in the program ✓ Allow Implementer access as needed for training and quality assurance ✓ Market the Program to customers using PG&E approved materials and collateral ✓ Use the Program ACCA 4 Standard addendum with their service agreement to make the customer eligible for the rebate. ✓ Meet the background check requirements ✓ Support NATE (or equal) certification of technicians ✓ Abide by all Program Policies and Procedures. ✓ Ensure technicians have calibrated instrumentation that complies with Program accuracy criteria 	<ul style="list-style-type: none"> ✓ Be respectful to customers and their property ✓ Make the safety of customers and themselves the highest priority ✓ Attend and pass training required for Program certification ✓ Work with Implementer’s Field Quality Control Technicians as requested ✓ Take training and tests to increase the level of NATE (or equal) certification ✓ Comply with all Program policies and procedures ✓ Conduct site work following Program protocols ✓ Obtain and keep calibrated instruments required to do QM work 	<ul style="list-style-type: none"> ✓ Maintain high standards of quality and timeliness in processing applications. ✓ Treat customers with respect ✓ Attend Program Operations training ✓ Assure the accuracy and integrity of data entered into the Program Portal ✓ Report issues or questions to AC Quality Care via email (acqualitycare@builditgreen.org) or phone (510-306-2272)
<p>✓ Provide feedback on how to improve the Program. We want to hear from you!</p>		

2.4. Contractor Tools & Equipment

BIG will maintain a list of instruments, probes, and measurement tools that meet accuracy requirements for this Program. Each Participating Contractor will assemble a list of tools they want to use. Those items that are not on the list and which the contractor still wants to use for the Program shall be submitted to BIG for approval.

2.4.1. Tools & Supplies

The tools and equipment needed to provide AC Quality Care to your customers include general purpose hand tools and materials as well as measurement instruments.

- Standard safety gear including, but not limited to, safety goggles, hardhat, and rubber gloves.
- Smart phone or tablet running Apple iOS or Android software, preferably with camera and internet connectivity.
- Refrigerant fill and recovery tanks for R-22 and R-410a refrigerant.
- Small section (about 8 inches) of refrigerant pipe insulation to insulate surface temperature sensors.
- Sandpaper and/or sand-cloth to clean piping area before adding measurement probes.
- Digital multi-meter that measures AC/DC voltages and resistance.
- Tools for cleaning coils, including appropriate coil cleanser and pressurized water as need for the job either from a portable tank or hose.
- Wire nuts and miscellaneous wire connectors.
- Fin straightener.
- Mirror.
- Button flush-style plugs (if drilling holes in the HVAC unit to measure refrigerant charge) **OR** UL181 compliant pressure sensitive tape **OR** FSK tape.
- UL181 compliant duct sealing mastic.
- Standard HVAC service and hand tools that are appropriate for the equipment being serviced.
- Drill and step drill with the ability to drill a 5/8 inch hole with hole sealing button flush-style plugs.
- Screwdrivers, wrenches, ratchet, and sockets.
- Permanent marker.
- Sheet metal hex-head screws for replacement panel fasteners.
- Locking caps for refrigerant access ports (Required replacement when refrigerant service is performed)

2.4.2. Recommended Instruments

The lists of instruments in each category below have been reviewed by PG&E to meet the programs specification. If the contractor has a question about whether a different brand or model instrument meets the Program requirements, please contact Build It Green.

Temperature Probes

- Fieldpiece ATA1 K-type thermocouple with alligator clip
- Fieldpiece ATB1 K-type bead thermocouple
- Fieldpiece ATR1 piercing type thermocouple for ventilation ducts
- Fluke 80PK-1 bead probe
- Fluke 80PK-11Velcro K-type temperature probe
- Testo 0613 4611 Velcro pipe wrap probe
- Cooper Atkins 4011 Pipe strap probe Type K
- Oakton WD-08516-75 detachable probe-Radiation shielded probe
- Transcat TC805-Radiation shielded thermocouple probe

Temperature - Dry Bulb

- Omega HH314 Temperature and RH Sensor
- Fluke 50 Series I & II thermometer models 50S and 50D
- Oaktron Acorn Temp JKT Thermocouple Thermometer

Temperature - Wet Bulb

- Extech EA20 Temperature and RH Sensor
- Testo 605-H2 Mini Stick temperature and RH Sensor

Pressure Gage

- Digi-Cool DRSA1200 Digital System Analyzer
- Fieldpiece SMAN2 Digital System Analyzer
- Fieldpiece SMAN3 Digital System Analyzer
- Testo 550 Digital System analyzer
- Testo 560 Digital System analyzer

Differential Static Pressure

- Omega HHP 2080 Series
- Testo 435 Series

Multi-Meters

- Fieldpiece HS-35 Stick Meter
- Fieldpiece HS-36 Stick Meter
- Fluke 375 Multi-Meter
- Fluke 376 Multi-Meter
- Amprobe ACD-14 TRMS-FX Clamp-on meter
- Amprobe ACD-14 FX Clamp-on Multi-Meter
- Field Piece 4533
- Milwaukee 2206-20

Static Pressure Probes

- Dwyer A-301, 02, 03, 05, 06, 07, 08, & A346

2.4.3. Measurement Instruments Accuracy Specifications and Calibration Intervals

Field instruments shall include the ability to measure the following parameters to the specified accuracy and conform to the indicated calibration interval.

Table 4: Measure Variables, Accuracy & Calibration Internal Details

Measured Variables	Units	Accuracy Specification	Calibration Interval
Supply Air (Dry Bulb)	F	±1.8	Monthly – single point ice bath 32°F
Return Air (Dry Bulb)	F	±1.8	Monthly – single point ice bath 32°F
Outside Air (Dry Bulb)	F	±1.8	Monthly – single point ice bath 32°F
Supply Air Wet Bulb	F	±1.8	Monthly Wet sock – same as dry bulb Electronic – salt solutions at 33% and 75% RH
Return Air Wet Bulb	F	±1.8	Monthly Wet sock – same as dry bulb Electronic – salt solutions at 33% and 75% RH
Suction Line (Dry Bulb)	F	±1.8	Monthly – single point ice bath 32°F
Liquid Line (Dry Bulb)	Psig	±1.0	Monthly – single point ice bath 32°F
Suction Pressure	Psig	±1.0	Monthly
Discharge Pressure	psig	±3.0	Monthly
External Static Pressure	lwc	±0.02	Check zero before use Annual callibration or as recommended by manufacturer
Condenser Amps (True RMS)	% of rdg	±3.0	Annually
Compressor Amps (True RMS)	% of rdg	±3.0	Annually
Supply Blower Motor Amps (True RMS)	% of rdg	±0.5	Annually
Charging Scale	% of rdg	±0.5	Annually
Carbon Monoxide Measurement Instrument	ppm	±5	As directed by manufacturer

* Calibration to be confirmed by the Contractor.

3 Contractor Program Training

Participating Contractors and technicians will be trained by BIG to be able to meet Program requirements. Program success is providing contractors with the tools, materials and resources to integrate the Program into their portfolio of services. Contractor training occurs in the following phases:

3.1. Training Curriculum

Table 5: Program Course Descriptions

Course Title & Description	Target Audience/ Prerequisites	Duration/ Delivery Method
<p>Technician Technical Training - Required Objectives: Give experienced technicians the knowledge and hands-on experience to perform ACCA 4 assessments and repairs and pass training day quiz. Content:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Program Overview including ACCA 4; air flow; refrigeration. Hands-on troubleshooting refrigeration faults on working units. 	<p>Experienced HVAC technicians</p>	<p>1 Day Classroom, on site as appropriate</p>
<p>Operations Training - Required Objectives: Gain working familiarity with Program processes and IT Tools Content:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Contractor Handbook <input type="checkbox"/> SAMobile application <input type="checkbox"/> BIG Contractor Portal 	<p>Back office support or Technicians and contractors who have completed technical training</p>	<p>Approximately 1 Hour Live webinar Or- Onsite training</p>
<p>Sales Training - Optional Objectives: Equip contractor staff for marketing and selling QM Service to customer Content</p> <ul style="list-style-type: none"> <input type="checkbox"/> QM Value Proposition Presentation <input type="checkbox"/> Contractor Handbook <input type="checkbox"/> AC Quality Care Program Rebate Work Flow <input type="checkbox"/> Program Sticker Sheets <input type="checkbox"/> Assessment & Repair Checklist w/commentary <input type="checkbox"/> AC Quality Care Program Brochures 	<p>Contractors and technicians. No prerequisites.</p>	<p>Training time varies At Contractor's Office or - Various group locations - Stockton ETC, Fresno, north valley, Bay Area</p>

Course Title & Description	Target Audience/ Prerequisites	Duration/ Delivery Method
<p>Field Ride-Along Training - Optional</p> <p>Objectives: Deepen the employee knowledge and skills for practical application of the Program</p> <p>Content</p> <p><input type="checkbox"/> Covers all aspects of program except back office</p>	<p>Technicians and contractors who have completed Technical, Sales, or Operations Training</p>	<p>Duration varies and depends on participation level</p> <p>May be required in response to customer complaints, field verification results, and the like.</p>

4 Customer Eligibility

Program eligibility is based on the site address within PG&E’s service area. Program rebates are paid to the PG&E customer on file for that site address unless the required authorization is obtaining to issue the rebate to the Participating Contractor. A customer’s eligibility is verified through the electric **Service Address Identification Number (SAID)**. Participating Contractors can verify customer eligibility by looking on the Customer’s PG&E Energy Statement (Page 3) or by having the customer contact the Smart Energy Line at 1-800-933-9555.

Standard Energy Statement: Page 3



Figure 1: Location of SAID on PG&E Energy Statement

Note: Be sure to verify that the customer has an Electric and not just a Gas SAID. Some PG&E gas customers get their electricity from another supplier, and are thus ineligible for the Program.

In addition to living in a home powered by PG&E electricity with its own meter, a customer must meet the following requirements:

- **The Building:** Single family homes and duplexes are eligible for AC Quality Care rebates.
 - One and two-family dwellings in the PG&E service territory, including PG&E electric customers with propane gas-fueled appliances, are eligible for the Program. Rental houses are also eligible if tenants obtain permission from the property owner. HVAC maintenance is typically the responsibility of the building owner, though sometimes it can fall to the building tenant. In the case where the owner pays for the work and wants access to the rebates, the tenant can choose to assign the rebate to the contractor who then applies it against the cost of the work. This or other agreements are between the tenant, owner and contractor.

PG&E is not involved. *Note: Mobile Homes and Manufactured Homes are not eligible.*

- **Equipment:** The HVAC system is equipped with central air conditioning and/or a central heat pump system and was installed in the home for at least one (1) year.
 - Each ducted, forced air, unitary, vapor compression HVAC central air conditioning system serving a home is eligible for incentives. Single phase systems with up to 5 ton capacities are eligible. Both split and packaged systems are eligible.
 - **Multiple Systems:** A dwelling may have more than one HVAC system and **each** is eligible for the rebates. A system may not be eligible if it has been serviced through the Program in the past 5 years.

5 Rebate Details

5.1. Program Rebate Requirements

In support of the industry transformation and energy goals of the Program, rebates are available for specific measures. The intention of these rebates is to help offset the extra cost of providing a higher quality comprehensive service, not to cover the full cost of the work. Currently, there are five (5) rebates being offered. All rebates are subject to the following terms:

- 1) A completed Rebate Application Package must be submitted to BIG and consist of:
 - a. The completion of the ACQC assessment and the submission of the results to the BIG database via SAMobile.
 - b. A signed and dated copy of the Customer Rebate Application Form.
 - c. A copy of your itemized invoice for all the work needed to bring equipment up to the ACCA standards. Invoice/contract forms must clearly break down and describe the work performed. Not all of the recommended work may qualify for rebates. Quality Maintenance requires that the customer receive a comprehensive report with recommendations for correcting **all** deficiencies, so the customer can decide what is best for them.
 - d. Quality Maintenance Service Agreement Addendum, if applicable.
- 2) PG&E will pay rebates to the customer, unless otherwise indicated by the customer on the application that the contractor should receive the rebate(s).
 - a. Customer has the option to assign the rebate(s) to the contractor in exchange for a reduction in the invoice cost of the measure (i.e. “instant rebate”). Rebates on an HVAC system cannot be split between the customer and contractor.
 - b. Multiple applications for the same customer are possible as in the case of a Refrigeration System Assessment taking place in May if the Assessment was

done during December. Contact BIG with any questions you may have about this.

- 3) Rebate amounts are fixed and cannot be adjusted up or down based on the cost of the work performed. Work performed at a cost to the customer which is less than the rebate amount is not eligible for a rebate.
- 4) Separate rebates with separate applications are required when multiple eligible systems exist in a single home.
- 5) A customer must acknowledge that they have used a licensed, participating contractor that followed applicable permitting requirements for the installation of AC Quality Care maintenance work on Customer Rebate Application Form.

5.2. Rebate Details for AC Quality Care Measures

Table 6: Rebate Details for AC Quality Care Measures

REBATE DETAILS Visit www.ACQualityCareRebate.com to view the list of available rebates.		
	Prerequisite	Requirements to Qualify for the Rebate
ACCA Standard 4 HVAC System Assessment	<input type="checkbox"/> No prerequisite measures. All measures must be performed by a Participating Contractor's qualified technician.	<input type="checkbox"/> Must cover all the steps in the Assessment Process including the conversation with customer about their goals and concerns. <input type="checkbox"/> Must include a report with invoice for work required to meet standards. <input type="checkbox"/> Must include filter change with the date placed on filter*, condenser coil cleaning, and a static pressure check. The initial assessment typically takes 1 hour. Customers can choose to have one contractor do the Assessment and a different contractor to do the work. *If the filter cannot be changed, technicians should date the existing filter and write "Recommended filter change" on the filter.
Refrigerant Charge Adjustment	<input type="checkbox"/> Completion of the Assessment	<input type="checkbox"/> The assessment test must demonstrate refrigerant cycle test-in failing and test-out passing in SA Mobile. <input type="checkbox"/> Must be done when weather conditions will support accurate results. <input type="checkbox"/> A static pressure reading between 0.5-1.0 IWC must be achieved before completing a charge adjustment and cannot be performed if condenser coils are more than 15% damaged. <input type="checkbox"/> Suction line must be fully insulated. <input type="checkbox"/> Locking caps must be installed.
Efficient Fan Delay	<input type="checkbox"/> Completion of the Assessment	<input type="checkbox"/> The installed fan delay relay must be an approved model listed by the Program. Visit the AC Quality Care website Contractor page for a list of eligible fan delay relays.

Blower Motor Retrofit	<input type="checkbox"/> Completion of the Assessment	<input type="checkbox"/> The installed motor model must be a direct drive, permanent magnet, constant speed motor listed by the Program. Visit the AC Quality Care website Contractor page for a list of eligible motors.
One-Year Quality Maintenance Agreement	<input type="checkbox"/> Completion of the Assessment <input type="checkbox"/> Completion of one (1) Energy Saving Measure	<input type="checkbox"/> The standard maintenance agreement must include the provided PG&E's Maintenance Agreement Addendum. Please see QM Maintenance Agreement Addendum for a copy of this form. <input type="checkbox"/> The agreement must cover at least one year of maintenance with two seasonal visits. On the maintenance visits, the customer should be reminded of any measures that were identified during the assessment, but not performed.

6 Steps for Performing ACQC Program Services

Performing the quality maintenance (QM) services is at the heart of PG&E's Residential ACQC Program. Below is a short summary of expectations for each stage of the process.

Table 7: Program Services: Assessment, Repairs & Retrofits and Service Agreement

The Assessment	The Repair	The Service Agreement
<input type="checkbox"/> Interview the customer <input type="checkbox"/> Inspect their HVAC system following the QM Questionnaire* <input type="checkbox"/> Determine what repair and/or retrofits are needed to bring the system up to optimum performance). <input type="checkbox"/> Present the findings and recommendations to the customer, including potential benefits and estimated (bid) costs.	<input type="checkbox"/> Upon customer approval, perform the agreed upon scope of HVAC work recommended in the bid as well as any additional safety and reliability measures. If the work approved by the customer meets the requirements of a measure, then a rebate application can be submitted.	<input type="checkbox"/> Educate the customer on the features, benefits, and cost of purchasing a minimum one-year service agreement. <input type="checkbox"/> Complete and submit the proper QM customer documents.

*via the FREE SAMobile software available online at MySAMobile.com.

6.1. Performing the ACQC Assessment

Prior to completing qualified measures for ACQC rebates, a complete assessment of the customer's HVAC system is required. This assessment includes relevant components of ACCA 4. Refer to training materials for an annotated version of the Assessment form that provides step-by-step guidance to a Participating Contractor.

As a Participating Contractor, the Program provides free access to a mobile application for assessment completion. This tool and the application submission process are detailed below.

6.1.1. SAMobile (Service Assistant Mobile) Software

SAMobile is software for guiding Participating Contractors and their technicians through all phases of the ACQC assessment. The Program provides this software free to all Participating Contractors. SAMobile is an application that runs on Apple and Android smart phones and tablets, as well as laptop and desktop computers. SAMobile allows users to capture data with or without an internet connection. When at the customer site, this tool guides technicians step-by-step through protocols for performing the ACQC inventory and assessment.

If the work is approved by the customer, a technician completes the necessary work and documents the completed maintenance in SAMobile. The tool will also record key HVAC performance parameters and conditions before and after the improvements. This information will be transmitted to the Program database for seamless reporting. Please refer to the Assessment Checklist for more information.

6.1.2. Customer Rebate Application

The Customer Rebate Application is required. Please note that the application is completed and signed by the customer but the Participating Contractor is responsible for submitting the application to BIG within 60 days from the date of work. Here are the steps:

- 1) You complete the work for which a rebate is sought. A complete list of measure requirements is available at www.ACQualityCareRebate.com
 - a. For the Assessment measure, the Technician completes the entire assessment through the SAMobile application or as described in the QM Assessment Checklist attached to this handbook. They provide the customer with a report and recommendations, including an estimate for the recommended work. The filter must be changed and dated by the technician along with a condenser cleaning.
 - b. For the Blower Motor Retrofit measure, the Technician installs the replacement motor to the manufacturer's specification that is on the Program approved list maintained by BIG and available on the AC Quality Care Rebate Program website (<http://acqualitycarerebate.com/>).
 - c. For the Efficient Fan Delay Relay measure, the Technician provides and install the fan delay relay to the manufacturer's specification that is on the Program approved list maintained by BIG and available on the AC Quality Care Rebate Program website (<http://acqualitycarerebate.com/>).
 - d. For the Refrigerant Adjustment measure, the Technician completes the Refrigeration Cycle tests in SA Mobile and completes an adjustment on the eligible HVAC system.
 - e. For the One-Year Quality Maintenance Agreement, the Technician completes a customer-signed Maintenance Agreement Addendum in addition to the company's standard maintenance agreement. The customer must first have the Assessment and one (1) energy efficient measure completed.

- 2) Provide the customer with a copy of the PG&E Customer Rebate Application and submit a completed form to BIG for application processing. Make sure the customer has the opportunity to read and understand the terms and conditions list on the last page of the application.
- 3) The customer must indicate, by checking a box, that they have followed the applicable permitting requirements for the measures installed. Then they sign and date the application, and include their electric service identification number from their electric account detail section on their PG&E bill.
- 4) The customer can assign the rebate to the contractor by completing the appropriate section on the Customer Rebate Application Form. The assignment applies to all rebates that are applied for on that HVAC system.
- 5) Leave a copy of the application documents with the PG&E customer along with company contact information. Submit an application to BIG within 60 days from the date of work via the ACQC Contractor Portal. Re-submit the application within the 60 day time frame if corrections to the application are identified through the Desktop Review process.

6.1.3. “What to Expect” Leave-Behind

The “What to Expect” document is included in the Customer Rebate Application Form that helps explain the AC Quality Program. It covers things such as completion of the rebate application process and subsequent inspections the may be performed by BIG and PG&E. A copy of this document is available on www.ACQualityCareRebate.com.

6.1.4. Program Stickers

Technicians will be responsible for placing a single AC Quality Care Program sticker to the HVAC condenser unit. A smaller bar code sticker (not pictured) will be placed on the completed rebate application. Technicians will be required to input the sticker number in SAMobile. Each eligible HVAC system requires a unique rebate application and sticker. Stickers can be ordered by contacting BIG and are shipped via USPS Priority Mail in quantities based on the contractor’s level of participation in the Program. Contractors may be asked to cover the costs of rush shipping.

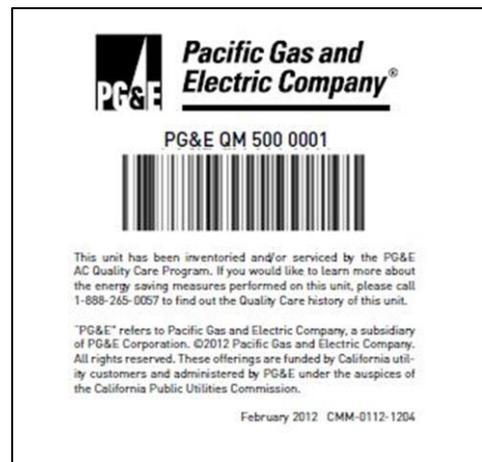


Figure 2: Sample Program Sticker

7 Application Submission Process

Participating Contractors play a central role in the application process by uploading the application document(s) to the Contractor Portal. The application must include the following:

- ✓ Completed Assessment through the SA Mobile application

- ✓ Customer Rebate Application Form
 - ✓ Contractor's invoice for the work done on the customer's system with enough detail to support the application.
 - ✓ If applicable, the signature page of the One-Year Quality Maintenance Agreement
- BIG will perform Quality Control review by inspecting both the completeness of the application and the actual work performed.

The following sections provide details about the three elements of a complete application:

7.1. ACQC Assessment and Repair Checklist

The ACQC Assessment and Repair Checklist is the information the technician collected during the assessment and repair process, using the SAMobile software. The technician or back office staff member uploads this data from the mobile device to BIG's Contractor Portal. The data becomes part of the customer record, available for subsequent review by you, BIG, or PG&E. This data will be audited for evidence that the work for which the rebate is claimed meets Program requirements.

7.2. Customer Rebate Application

Page 3 of the Customer Rebate Application, completed and signed by the customer, must be submitted to BIG. The other pages should be left with the customer along with company contact information. The Customer Rebate Application needs to be scanned electronically in PDF or JPG format and submitted through the Contractor Portal (see 7.4 below).

7.3. Customer Invoices

The last part of the rebate application package is a copy of your customer invoice for the work covered by the rebate. The customer invoice needs to be scanned electronically in PDF or JPG format and submitted through the Contractor Portal.

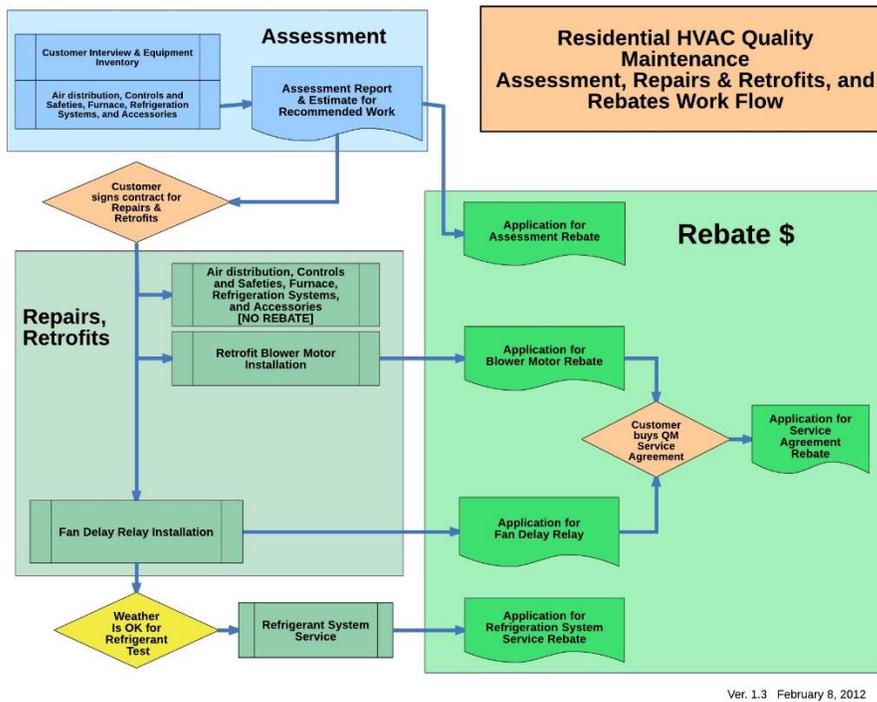
7.4. ACQC Contractor Portal

The ACQC Contractor Portal is the web based system for submitting a customer's signed rebate application and supporting documentation, including but not limited to the contractor's invoice, and the Assessment details. The Contractor Portal is used most often by back office staff and allows application information to be submitted seamlessly from SA Mobile.

All Program data will be captured in the Contractor Portal. It aggregates data from Participating Contractors, technicians, and Field Quality Control verifiers in a common format for ease of reporting. The customer system data collected using SAMobile is matched with customer data entered in the back office. Participating Contractors and Program administrators can access this information through the Contractor Portal using a unique login. BIG has also made available a webinar training of the rebate application submission process. The recording is available upon request.

Figure 3 below depicts the Program workflow and provides the Participating Contractor with a summary of the step-by-step process from Assessment to Rebate.

Figure 3: AC Quality Care Workflow



7.5. The Repair

Once your customer has agreed to all or some of the recommended work and has signed a contract, complete the agreed upon adjustments, repairs and retrofits, including the refrigeration fault detection and diagnostics using the SAMobile software. Please refer to Section 5.2 for details on rebates and approved measures.

7.5.1. Final Report to Customer

Upon completion, the customer receives a final report outlining the work that was actually completed. The SAMobile application has the ability produce a final report available in PDF format. Information on how to produce this report will be covered in the Technical Training.

7.6. One-Year Quality Maintenance Agreement

A major goal for the AC Quality Care Program is for customers and contractors to adopt a model of ongoing scheduled maintenance that follows the comprehensive ACCA 4 standard. To qualify for the One-Year Quality Maintenance Agreement rebate, the standard service agreement must include the One-Year Quality Maintenance Program Agreement as an addendum. The addendum sets out the requirements for the contractor and the customer and must be signed by both parties. A copy of the Addendum is provided on the Program website.

8 Quality Assurance and Quality Control

Quality Assurance (QA) is making sure technicians have the skills, tools, time, and incentives to do excellent work for their customers. The other half of the quality formula is Quality Control (QC) which includes inspections of work performed that are a critical to ensuring Program quality.

8.1. Quality Assurance and Quality Control Standards and Procedures

To ensure Participating Contractors follow the Program's high standards and expectations, BIG will perform Quality Assurance (QA) and Quality Control (QC) review processes:

8.1.1. Contractor Eligibility and Enrollment

A review of Contractor eligibility and enrollment is to ensure Contractors meet the requirements for participating in the Program as outlined in this handbook and the CPA. BIG will ensure Participating Contractors have submitted complete and current enrollment documentation and are up to date on training.

8.1.2. Customer Rebate Measures Application

A review of Customer rebate measures is to ensure the Participating Contractors are providing the services outlined in this handbook (see Rebate Details for AC Quality Care Measures Section 5.2). BIG will review each rebate application to ensure that it is complete and accurate.

8.1.3. Customer Rebate Measures Installation

A review of the measures installed is completed through a QC inspection to ensure that Participating Contractors meet quality installation and Program standards out in the field. The Program performs several types of inspections that are described for customers in the "What to Expect" document and outlined in detail in the Quality Assurance / Quality Control Plan. BIG will inspect a percentage of completed jobs depending on the history of work and a Contractor's participation. New Participating Contractors will be subject to higher rates of inspections, as will technicians who have failed inspections (this is where "ride-along" training can be useful, especially for technicians new to the Program).

If the work passes inspection, BIG submits the application information electronically to PG&E for rebate processing. At this point, most applications are checked only for completeness of data, but a percentage is randomly selected for field verification by PG&E's Central Inspection Program (CIP). The CIP inspectors and BIG Field QC Verifiers follow the same QC procedures.

If the work fails inspection, BIG contacts the Participating Contractor to explain what CIP found and can make arrangements to ensure the required corrections are made. Rebate payments cannot be made while installation issues are pending. BIG and PG&E will make every effort to cooperate with you to ensure that customers are satisfied.

8.1.4. Quality Assurance Phone Questionnaire

Conducting QA phone questionnaires is an option to verifying HVAC Rebate Measures. If a customer cannot participate in a site visit to verify HVAC measures, then BIG will conduct a phone interview with the customer to ensure that the Participating Contractor is providing the services outlined in this handbook and the CPA.

9 Customer Satisfaction

9.1. Satisfaction Survey

BIG will send out satisfaction surveys to customers. These surveys will focus on the Program, the processes, and the overall customer experience. A survey will be sent to all customers that provide an email address after the rebate has been issued. Please note that a customer that with multiple applications may receive more than one survey.

9.2. Issues Resolution

BIG encourages any customer with concerns regarding the Program or service they received from a Participating Contractor to call the Program's telephone number 510-306-2272 (ACQC). Contractors are required to resolve all reasonable complaints from PG&E customers in a timely manner consistent with the severity of the complaint. If the complaint relates to Program delivery, BIG will take the following steps:

- 1) Upon receiving a customer complaint the Customer Service Representative (CSR) will capture all of the required information in the Customer Complaint Log.
- 2) Within 24 hours of receiving the complaint, the Quality Assurance and Control Supervisor could contact the customer to schedule an appointment to meet with the customer on site.
- 3) The Quality Assurance and Control Supervisor will document the findings and provide an overview to the AC Quality Care Program Manager (PM).
- 4) The PM will schedule a conference call with the Participating Contractor and PG&E's PM, if necessary, to present the findings and determine the next steps.

In the event a final decision cannot be rendered during this phone call, the PG&E PM will commit to making a final decision within two days.

The following applies if the complaint relates to the Participating Contractor performance:

- 1) Upon receiving a customer complaint, the Customer Service Representative (CSR) will capture all of the required information into the Customer Complaint Log. In the event the complaint is anonymous, Build It Green will share the feedback with the Contractor and ensure that program standards are being met on future applications.
- 2) In the event that the customer has not been in contact with the contractor who performed services under the program and the complaint is not an emergency, the CSR will provide the contractor's contact information and follow-up with the customer

- to ensure a resolution has either been achieved or is in the process of being achieved.
- 3) In the event the customer has been in contact with the contractor who performed services under the program but a resolution has not been reached or the complaint is determined an emergency, the CSR will escalate the complaint to their appropriate manager who will then reach out directly to the contractor. The contractor is expected to communicate to Build It Green the steps that are being taken (or have been discussed with the homeowner) to resolve the case.
 - 4) The contractor is expected to resolve all reasonable complaints from PG&E customers in a timely manner consistent with the severity of the complaint. A customer service complaint is considered resolved when a reasonable course of action is agreed to by all parties involved and communicated to Build It Green.
 - 5) In the event the Participating Contractor is unable to resolve a reasonable customer service complaint in a timely manner, the case will be escalated to PG&E's Project Manager for review. Failure to resolve a reasonable customer complaint, repeated lack of coordination around resolving complaints, and/or a trend of complaints documented for a specific contractor can compromise participation in the Program.

10 Program Marketing – Getting Customers

10.1. Marketing Support

PG&E expects contractors to take the lead in marketing the Program to customers with PG&E and BIG providing support through the Program website. Any marketing efforts other than those stated in the marketing protocols and provided program materials must be approved by PG&E.

10.1.1. AC Quality Care Program and PG&E Websites

ACQC Program URL: www.acqualitycarerebate.com

The AC Quality Care website contains information on the Program for both customers and contractors including customer benefits and eligibility, details on the qualifying measures and rebates (including amounts) and a listing of the current Participating Contractors with their contact information. Use the following address when directing potential customers to the AC Quality Care website; www.acqualitycarerebate.com.

PG&E URL: www.pge.com/acqualitycare

The PG&E webpage contains a short summary of the Program, its benefits, and links to the AC Quality Care website as well as other sources of information supporting customer participation in energy savings activities.

10.1.2. PG&E Customer Brochure and Door Hanger

PG&E has produced a Program brochure and door hanger for Participating Contractors. Included is a space to attach or stamp your company's business card or contact information. Brochures are available through BIG. These brochures are available to

participating contractors only. BIG will also provide an electronic file upon request. Please submit all requests for marketing materials to Build It Green via email at acqualitycare@builditgreen.org.

10.2. Customer Collateral Guidelines

Below are guidelines for providing information about PG&E’s AC Quality Care Program in print, online, digital, or broadcast customer materials.

10.2.1. Pacific Gas and Electric Company (PG&E):

- ✓ Use “**Pacific Gas and Electric Company**” upon first reference and “**PG&E**” thereafter.
- ✓ PG&E’s logos **may not** be used without written consent from the company.
- ✓ Providing factual and accurate statements regarding a contractor/company relationship with PG&E is permitted, provided there is no reference to PG&E “endorsing” or “recommending” a contractor’s products or services.
- ✓ PG&E maintains a non-endorsement policy and therefore Participating Contractors are prohibited from making any such statements.

10.2.2. AC Quality Care:

Table 8: AC Quality Care Correct Terminology

❑ CORRECT USAGE:	❑ NOT ACCEPTABLE (examples):
<ul style="list-style-type: none"> ❑ “PG&E’s AC Quality Care Program” ❑ “AC Quality Care” 	<ul style="list-style-type: none"> ❑ Residential Quality Maintenance ❑ ACCA 4 Quality Maintenance ❑ QM
<ul style="list-style-type: none"> ❑ When referring to a Participating Contractor, use “an AC Quality Care Participating Contractor” upon first reference and “a Participating Contractor” thereafter. 	<ul style="list-style-type: none"> ❑ AC Quality Care Contractor ❑ PG&E-approved contractor ❑ PG&E-certified contractor
<ul style="list-style-type: none"> ❑ Regarding incentives use “up to \$625 in rebates.” 	<ul style="list-style-type: none"> ❑ Cash Back ❑ Get/Receive \$625
<ul style="list-style-type: none"> ❑ When describing Program features, use “AC Quality Care Assessment” and “AC Quality Care Improvements” 	<ul style="list-style-type: none"> ❑ AC Quality Care Duct Test and Seal ❑ AC Quality Care Tune Up