

# PG&E Meter-Based Savings Platform Rulebook v0.5 (October 26, 2017)

Downloaded 7/10/2019 from: <https://www.caeccc.org/rulebook-policy-manual>

## Important Note for Reviewers/Commenters:

PG&E is soliciting informal comments on this early version of the meter-based (aka, NMEC) “platform” rulebook. This document compiles CPUC requirements and guidance we have received (e.g. EE Policy Manual, HOPPs ruling, D.16-08-019, Resolution E-4818) that govern how NMEC programs should calculate and claim savings.

The rulebook does not intend to impose new rules or restrictions or design any program elements; instead, it seeks to level-set bidder expectations so they can design robust and compliant programs.

This draft (v0.5) is in an early stage that has not been reviewed or approved by PG&E management. We would like to share it now so that stakeholders can provide feedback on our thought process and help shape the document into a helpful and informative product.

While we can’t commit to responding to every comment, we will consider all of them and would be happy to discuss with stakeholders. Comments that don’t make it into the initial release would be held and considered for a future update.

Please focus comments on the following:

- What elements is PG&E overprescribing, and should leave more open-ended for bidders to propose?
- What elements would benefit from more detail?
- Are there any elements that are missing that PG&E should add?

Please cite the relevant section number with each comment. For our tracking purposes, it would be helpful if commenters used the embedded template below.

Please send comments directly to Ryan Chan ([r7ck@pge.com](mailto:r7ck@pge.com)) by **Tuesday, November 7**. As mentioned above, comments received after this date will likely not be incorporated into the initial release, but they will be considered in any future updates.

PG&E greatly appreciates your review and consideration.



NMEC Comment  
Template.xlsx

PACIFIC GAS AND ELECTRIC COMPANY

# PG&E Meter- Based Savings Platform Rulebook

---

Version 0.5

**This document is maintained by: MBS Platform Lead**

10/26/2017

Contents

- 1. Introduction ..... 4
- 2. Eligibility..... 4
  - 2.1. Measure Eligibility ..... 5
    - 2.1.1. Public Purpose Programs Surcharge and Coincident Savings ..... 5
    - 2.1.2. Fuel Substitution ..... 5
  - 2.2. Customer Eligibility ..... 5
    - 2.2.1. Double Dipping and Double Counting ..... 5
    - 2.2.2. Energy Model Fitness Thresholds ..... 6
    - 2.2.3. Non-Utility Meters ..... 6
    - 2.2.4. Baseline Period Requirements..... 6
- 3. Influence ..... 7
  - 3.1. Demonstration of Program Influence ..... 7
- 4. Measure Types and Baselines..... 7
  - 4.1. Measure Types..... 7
    - 4.1.1. Allowable Measure Types..... 7
  - 4.2. Regressive Baselines ..... 8
  - 4.3. Commonly-Repaired Equipment..... 8
  - 4.4. Add-on Equipment..... 8
    - 4.4.1. EUL for Add-On Equipment..... 8
  - 4.5. Behavioral, Retrocommissioning, and Operational ..... 8
    - 4.5.1. EUL for BRO measures ..... 8
- 5. Savings Calculations ..... 8
  - 5.1. PG&E Energy Usage Data ..... 9
  - 5.2. Gross Claimable Savings Determination ..... 9
    - 5.2.1. Baseline Selection ..... 9
    - 5.2.2. Normalization ..... 10
    - 5.2.3. Metering Duration ..... 10
    - 5.2.4. Calculations and Eligible Tools..... 10
    - 5.2.5. Evaluability..... 10
    - 5.2.6. Interactive Effects ..... 11
    - 5.2.7. Load Shapes ..... 11
  - 5.3. Net Claimable Savings Determination ..... 11
  - 5.4. Savings Persistence..... 11
  - 5.5. EUL Determination..... 12
    - 5.5.1. EUL for bundles of measures ..... 12
    - 5.5.2. EUL Maximum..... 12
    - 5.5.3. EUL and Cost-Effectiveness..... 12
- 6. Payment Calculations..... 13
  - 6.1. Measure Cost Determination ..... 13
  - 6.2. Incentive Structure Guidance ..... 13

6.3. Customer Incentive Caps .....	13
7. Inspections and QA/QC.....	13
7.1. High Impact Projects.....	13
7.2. Inspection Procedures .....	14
8. Regulatory Compliance and Reporting .....	14
8.1. Timing of Payments and Claims .....	14
8.2. Systems of Record .....	14
8.3. Energy Insight Documentation .....	14
9. Other.....	15

DRAFT

## Change Log

Version	Date	Description
v0.1	9/17/2017	
v0.2	9/29/2017	
v0.3	10/15/2017	
v0.4	10/18/2017	
v0.5	10/26/2017	Draft sent for external comment

Glossary (this section to be moved into an appendix)

Aggregation

Comparison group

Effective Useful Life

Influence

Gross claimable savings

Net claimable savings

Non-routine event

Observed savings

Persistence

Site-specific

NTG

## 1. Introduction

This chapter compiles rules and guidance associated with meter-based savings, including savings from behavioral interventions. While some written guidance around meter-based approaches exists, such approaches are not as well established as deemed or custom approaches. This chapter contains the best available guidance and Commission policy surrounding meter-based approaches at the time of this writing. It should be expected that language in this chapter will be expanded, modified, and clarified as guidance around meter-based approaches becomes established.

There are some fundamental differences in the calculation approaches among meter-based offerings. For example, aggregation or population-based approaches formulate non-participating control groups with similar characteristics to the participant group and use statistical methods to contrast the two. Such methods are common (e.g. residential applications) when populations are homogenous and large enough to yield statistically significant results. In other cases, as in the industrial sector, customer operations are too specific to generate large enough comparison groups. In these cases, a site-specific analysis may be required which is conducted by observing the pre-implementation data, projecting the post-implementation data based on the observation, and contrasting actual post-implementation data to the projection.

PG&E informally refers to these as the “aggregation” approach and the “site-specific” approach. In this document, rules and procedures may differ by approach; in these cases, the two are differentiated with [AG only] and [SS only]. When neither is indicated, the rule applies for both approaches.

## 2. Eligibility

## 2.1. Measure Eligibility

### 2.1.1. Public Purpose Programs Surcharge and Coincident Savings

Details: Customer must pay the Public Purpose Programs (PPP) surcharge on the gas or electric meter for which any energy efficiency interventions are proposed. The PPP surcharge information can be found on the utility bill. Further, in order to qualify as a PG&E project, the customer must show evidence of “coincident savings” (savings associated with an EE measure that coincide with periods customer is purchasing energy from utility and thus reducing grid/system impact). For electric projects, the customer must pay the PPP during the hour(s) in which the savings resulting from an energy efficiency measure will occur. For gas projects, the customer must pay the PPP during the month(s) that savings will occur. The Customer’s reduction in energy usage due to the EE measure must occur on the grid/system at all times when the EE measure is operational and its energy resource requirement is being met. Note: residential and small commercial (i.e. less than 20 kW maximum peak demand) customers with on-site photovoltaics are exempt from this requirement.

Exception 1: There is an exception for customers who are exempt from paying gas PPP per Public Utilities Code Section 896. These exempt PG&E customers include the United States (Federal facilities), United States Coast Guard, the American Red Cross, and Indian reservations.

Effective Date:

Rule Source: Energy Efficiency Savings at Sites with Non-IOU Fuel Sources -- Guidance Document, CPUC, August 1, 2014

### 2.1.2. Fuel Substitution

Details: Fuel substitution measures must pass the three prong test. The three prong test requires that each measure, project, and program: a) not increase source BTU consumption, b) have a TRC and PAC greater than 1.0, and c) not adversely affect the environment.

Natural gas fired self-generation, as well as self-generation units using other non-renewable fossil fuels, must be treated as fuel-substitution. Common with other types of fuel-substitution, any costs of gas transmission and distribution, and environmental externalities, must be accounted for. In addition, cost-effectiveness analyses of self-generation should account for utility interconnection costs.

Effective Date:

Rule Source: EE Policy Manual v5; D.06-12-013

## 2.2. Customer Eligibility

### 2.2.1. Double Dipping and Double Counting

Details: Projects receiving incentives or claiming savings through any meter-based program must not also receive incentives or claim savings for the same interventions through any other program, regardless of channel (e.g. downstream, midstream, or upstream) or platform (e.g. deemed, custom, meter-based) offering.

[Best Practice] To prevent double dipping and double counting, consider structuring customer participation agreements to require that program participants forego rebates and incentives for other EE programs for a specified period of time. Additionally, a quality control process should be established with the PA to identify potential double dipping and double counting and rectify if needed.

Effective Date:  
Rule Source: <TBD>

### **2.2.2. Energy Model Fitness Thresholds**

Details: [SS only] Models of building energy consumption for participating customers should demonstrate the ability to sufficiently characterize energy use by meeting certain fitness metrics. Currently, this is satisfied by meeting ALL of the following tentative values for these fitness criteria:

- CV(RMSE) (Coefficient of Variation of the Root Mean Squared Error) < 25%
- NMBE (Normalized Mean Bias Error) < 0.5%
- R<sup>2</sup> (Coefficient of Determination) > 0.7

In some cases, data from suspected non-routine events may be removed from the data set for model fitting if justification is provided. See the “Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation” document for details.

Note that while the exact values are currently under discussion, the concept of models demonstrating satisfactory fitness will likely be required.

Effective Dates:  
Rule Source: General thresholds from IPMVP and ASHRAE Guideline 14; Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation

### **2.2.3. Non-Utility Meters**

Details: Programs may conduct meter-based analyses using both utility-owned and non-utility-owned meters and sub-meters. Non-utility meters must be calibrated according to the manufacturer’s recommendations; calibration records must be maintained by the customer and available for PG&E to review upon request. Calibration records are not required for utility meters.

Effective Dates:  
Rule Source: HOPPs White Paper Ruling

### **2.2.4. Baseline Period Requirements**

Details: One year of pre-implementation usage data is required. Note that while both the HOPPs White Paper Ruling and the CA Energy Efficiency Evaluation Protocols prescribe a minimum of one year of pre-implementation data, recent work by LBNL/CPUC suggests that coverage factor analysis can produce meaningful results with less than one year of pre-implementation data. See the “Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation” for more details on coverage factor analysis.

Programs should specify both an interval length and a monitoring duration (e.g. hourly readings for twelve months). Savings uncertainty is a function of both the interval length and the monitoring duration; both interval length and monitoring duration should be considered together when designing eligibility criteria. The effects of energy efficiency must be observable when interval length, monitoring duration, effect size (i.e. percentage of savings), coefficient of variation of the model, and confidence interval are accounted for. See the Savings Calculations section for details.

Effective Dates:

Rule Source: HOPPs White Paper Ruling; CA Energy Efficiency Evaluation Protocols; Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation

### 3. Influence

#### 3.1. Demonstration of Program Influence

Details: The meter-based platform allows for a range of methods for programs to demonstrate influence of incrementality. While no specific minimum requirements for demonstrating influence are prescribed, all programs are required to influence customers to provide incremental savings than would be provided absent the program.

Programs must describe how they seek to attain incremental (i.e. attributable to the program) savings, and what customer and measure eligibility requirements the program would impose to exclude likely free riders. Influence may be demonstrated at either the program level or the project level.

Potential examples include: requiring a customer interview be conducted, conducting free ridership screening, tailoring marketing materials and approaches, tailoring customer eligibility to specific customers, or prohibiting implementation of measures with likely high free-ridership.

Effective Dates:

Rule Source: EE Policy Manual v5

### 4. Measure Types and Baselines

#### 4.1. Measure Types

##### 4.1.1. Allowable Measure Types

Details: The measure type describes an energy efficiency activity, a baseline, and its effective useful life. The following default baseline is used for each measure type:

Measure Type	Abbreviation	Source For Default Baseline
Add-On Equipment	AOE	Existing Conditions
Behavioral, Retrocommissioning, or Operational	BRO	Existing Conditions
Weatherization	WEA	Existing Conditions
Metered Replacement*	TBD*	Existing Conditions
Multi-Measure Metered Replacement*	TBD*	Existing Conditions

Note that the Normal Replacement (including Replace on Burnout), the New Construction, and the Early Retirement measure types are not allowed in meter-based approaches.

\*PG&E has identified the need to report meter-based projects and programs differently from deemed and custom projects. Meter-based projects and programs involving the replacement of equipment



should target equipment that could and would remain in service without program intervention. In that sense, they share characteristics with Early Retirement claims, although they may not need to meet Preponderance of Evidence standards. Notably, they also use a single baseline of existing conditions with EUL as described in sections below.

Effective Dates:

Rule Source: Project Basis EUL-RUL Guidance, EE Policy Manual v5, D.12-05-015, Resolution E-4818

#### **4.2. Regressive Baselines**

Details: Regressive baselines apply when existing conditions are more efficient than the code/standard practice baseline. Since meter-based projects always use the existing conditions as the baseline, regressive baselines do not have any meaning for meter-based projects. This is included here for clarity.

Effective Dates:

Rule Source: N/A

#### **4.3. Commonly-Repaired Equipment**

Details: If programs intend to provide incentives and/or claim savings for replacement of failed equipment, they need to make a data-supported case in their proposals that a given piece of equipment has a history of being repaired rather than replaced to justify use of an existing conditions baseline.

Effective Dates:

Rule Source: Staff White Paper Ruling

#### **4.4. Add-on Equipment**

##### **4.4.1. EUL for Add-On Equipment**

Details: When using a meter-based approach to claim savings, add-on measures should use an EUL as described in the “EUL Determination” section.

Effective Dates:

Rule Source:

#### **4.5. Behavioral, Retrocommissioning, and Operational**

##### **4.5.1. EUL for BRO measures**

Details: Interventions composed entirely of retrocommissioning and/or operational measures should claim a three-year EUL. Interventions composed entirely of behavioral measures should claim a two-year EUL if non-residential, or a one-year EUL if residential.

Effective Dates:

Rule Source: D.16-08-019 (note: supersedes HOPPs Ruling)

## **5. Savings Calculations**

### 5.1. PG&E Energy Usage Data

Details: When available and relevant, programs should use customer and energy data provided by PG&E. PG&E will perform quality control on this data to ensure customers' accounts are correctly matched. PG&E may also provide additional data to facilitate program implementation; it is recommended to discuss and finalize the regularity and format of data transfers prior to program launch and contract approval. Please refer to PG&E IT requirements.

Effective Dates:

Rule Source: N/A

### 5.2. Gross Claimable Savings Determination

Details:

- [AG only] Gross claimable savings are determined by composing a control group of non-participating customers that matches the characteristics of the participant population. Such characteristics typically include energy usage data, size (i.e. square footage), climate zone, and others. Note that "observed" savings, which calculate savings values purely based on weather-normalized analysis of pre/post interval data, are not directly claimable. Observed savings do not normalize for other non-weather factors, such as occupancy, square footage, or production, and they do not account for systemic (that is, exogenous to the effect of the program) changes in energy use.

By definition, the control group cannot be composed (and thus, gross claimable savings cannot be determined) until the participant population is established. For that reason, it is essential for programs to collect the necessary data to facilitate the creation of a robust control group. Programs should balance the costs of data collection and ease of implementation with the accuracy of the evaluation.

- [SS only] Gross claimable savings are determined by normalizing pre and post energy usage for applicable variables, which may include: weather, pre-intervention energy use levels, production, occupancy, non-routine events, and others. See Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation for details.

Effective Dates:

Rule Source: HOPPs Staff White Paper; Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation

#### 5.2.1. Baseline Selection

Details: Gross claimable savings are calculated using the existing conditions as the baseline (see Measure Types section above). Note that key parameters must also be monitored pre-install and normalized for post-install; key parameters are defined on a program and intervention basis. See the Normalization section below.

Effective Dates:

Rule Source: D.16-08-019; Resolution E-4818

### 5.2.2. Normalization

Details: [All] Savings must be normalized for any relevant factors. Coverage factor analysis should be used to identify which factors are relevant (e.g. outside air temperature and humidity, production, or occupancy); see citations for details on coverage factor analysis. The source of any normalization factors should be publically available if possible (e.g. weather data from published government sources); if not, the source of the data must be disclosed.

[SS only] Programs must normalize for non-routine events (e.g. occupancy changes, equipment failure, major increases/decreases in operational hours). Programs must establish procedures to identify types of expected non-routine events, thresholds for identifying the events, and actions taken to normalize data for those events.

Effective Dates:

Rule Source: HOPPs Staff White Paper; Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation

### 5.2.3. Metering Duration

Details: [SS only] Projects must be monitored for a long enough period to meet satisfactory levels of uncertainty. What is “satisfactory” will be determined in conjunction with the model’s goodness of fit and required levels of confidence. As discussed in the Eligibility section, savings uncertainty is a function of both the interval length and the monitoring duration. Interval length and monitoring duration should be considered together when designing eligibility criteria.

Effective Dates:

Rule Source: Draft Guidance for Program Level M&V Plans: Normalized Meter-based Savings Estimation

### 5.2.4. Calculations and Eligible Tools

Details: [All] Savings must be calculated using a publically-available methodology. Programs must state which methodology is used and must demonstrate that calculations are consistent with that methodology. The version number or publication date of the methodology must be indicated for each claim, project, or program; version or methodology changes must have clearly specified effective dates.

Examples include:

- <list>

Effective Dates:

Rule Source: <TBD>

### 5.2.5. Evaluability

Details: Project and program evaluations must be transparent and replicable; that is, a third party must be able to replicate the savings calculations, eligibility, baselines, and EUL for any project or program, potentially months or years after the project/program has concluded. This may include corroboration of discussions with participants and/or verification of installed measures.

For example, programs must maintain records of what data are considered outliers, how those outliers are defined, and what actions, if any, are done with those outliers (e.g. discard, normalize, use as-is). Programs also should have procedures to identify duplicate records and what action was taken with those outliers.

[Best Practice] Note that while the CPUC solely determines evaluation metrics, it is recommended to create some kind of feedback loop within the program design so that programs can iterate and improve while in implementation.

[Best Practice] If it is anticipated that models or methods will be updated frequently, it is highly recommended to consult with PG&E's evaluation team to determine if changing methods will create an undue burden for the evaluator. Not only must it be possible for calculations to be replicated by an evaluator, but it also must be done under reasonable cost and time constraints.

Effective Dates:

Rule Source: HOPPs Staff White Paper

#### **5.2.6. Interactive Effects**

Details: [All] Programs must calculate and report all energy impacts for both electric and gas for a given intervention, regardless of what commodity the intervention saves. For example, programs targeting only electric measures must still calculate and report gas savings.

Effective Dates:

Rule Source: EE Policy Manual v5

#### **5.2.7. Load Shapes**

Details: Currently, only DEER load shapes are capable of being reported. Since meter-based approaches allow for actual load shapes to be captured and reported, further discussion is needed on how to report actual load shapes for projects and programs.

Effective Dates:

Rule Source: <TBD>

### **5.3. Net Claimable Savings Determination**

Details:

- [SS only] NTG surveys are used to generate a net-to-gross ratio, which is then multiplied by the gross claimable savings in the above section. The questions within the NTG survey are determined in the program's evaluation plan.
- [AG only] Net claimable savings may be determined by composing a control group that matches the characteristics of the participant population. By definition, the control group cannot be composed (and thus, net claimable savings cannot be determined) until the participant population is set. Note that the control group composed for the purpose of determining net claimable savings may not necessarily be the same control group that is used to determine gross claimable savings. Additionally, NTG surveys may alternatively be used to generate a net-to-gross ratio instead of composing a comparison group.
- Note: NTG surveys are an option for either the SS or AG approach. SS analyses generally are not conducive to creating comparison groups, and thus an NTG questionnaire is typically used.

### **5.4. Savings Persistence**

Details: Savings resulting from a project must persist for at least the duration the metered data is observed; on average, savings are expected to persist through the EUL of the energy efficiency measure.

Any savings that cease during the monitoring period will be excluded from the claim by definition. Programs should describe what, if any, practices will be put in place to confirm a claimed EUL after a claim is made. Also see the Savings Calculations section.

Effective Dates:

Rule Source:

## 5.5. EUL Determination

### 5.5.1. EUL for bundles of measures

Details: If measure level savings (or the percentage of savings contribution) can be estimated and DEER EULs exist, use a weighted average approach to determine the bundle's EUL. If a DEER EUL does not exist for a measure, PG&E may be consulted and an EUL may be agreed upon for that measure.

For example:

- EEM1: 100,000 kWh savings, 10 year EUL
- EEM2: 200,000 kWh savings, 3 year EUL

The EUL of the bundle would be  $(100,000 * 10 + 200,000 * 3) \div (100,000 + 200,000) = 5.33$  years.

Projects with both electric and gas savings may use a similar approach by taking a weighted average of the converted BTU savings.

If measure level savings are unknown, the above approach is not possible. In that case, a program-level EUL should be proposed and agreed upon in coordination with PG&E's Evaluation team and possibly the CPUC.

A program-level EUL for a bundle of measures with varying EUL should be proposed with the following principles in mind:

- The first-year savings claim of the bundle should equal the first-year savings of the sum of the measures
- The lifecycle savings claim of the bundle should equal the lifecycle savings of the sum of the measures

Effective Dates:

Rule Source: HOPPs Staff White Paper

### 5.5.2. EUL Maximum

Details: The longest allowable EUL for installed measures is 20 years.

Effective Date:

Rule Source: D.14-10-046

### 5.5.3. EUL and Cost-Effectiveness

Details: [Best Practice] The EUL of an energy efficiency measure is a strong driver of cost effectiveness. As such, programs should include design elements which encourage long EULs relative to their costs. Such elements could include: contractual language in program agreements, incentive amounts tied to savings over multiple years, customer engagement during any monitoring periods.

## 6. Payment Calculations

### 6.1. Measure Cost Determination

Details: All meter-based programs using existing conditions must report full measure costs (aka, gross measure costs). Full measure costs must include the full cost of "any equipment or materials purchased, including sales tax and installation; any ongoing operation and maintenance costs; any removal costs (less salvage value); and the value of the customer's time in arranging for the installation of the measure, if significant."

Effective Dates:

Rule Source: Standard Practice Manual

### 6.2. Incentive Structure Guidance

Details: Any payment structure (for both implementer and customer payments) may be proposed for a given program. Payments could be based on observed savings, gross or net first-year claimable savings, gross or net lifecycle claimable savings, time and materials, milestones, or any other quantifiable metric or combination thereof. However, note that PA goals are currently set in terms of net first-year claimable savings. Customer and implementer incentive designs should be structured to "mitigate the risk of up-front payments exceeding the value of actual savings." See "Timing of Payments and Claims" below.

Note that customer payments are not required. Other sources of assistance (technical support, project financing) may be provided in addition to, or in lieu of, customer payments.

Effective Dates:

Rule Source: HOPPs White Paper Ruling, Section 3.4.3.3; D.16-08-019; Standard Practice Manual (?)

### 6.3. Customer Incentive Caps

Details: Customer payment for a given measure must not exceed the full measure cost without justification and approval from Commission staff.

Effective Dates:

Rule Source: EE Policy Manual v5

## 7. Inspections and QA/QC

### 7.1. High Impact Projects

Details: Individual customer projects with initial estimated savings that surpass 0.5 GWh, 200,000 therms, or \$100,000 in incentives must be submitted to PG&E for an early policy review in the early project development stage. The PG&E Custom Implementation Team will review the project and consider it for a Collaborative Review with CPUC staff.

Effective Dates:

Rule Source: N/A

## 7.2. Inspection Procedures

Details: Programs should disclose what visual inspection procedures, if any, are prescribed. Site inspections may be utilized either pre-implementation or post-implementation (or both) to ensure expected savings are realized. In addition, PG&E reserves the right to verify the presence or absence of equipment, confirm any loads on the equipment, and contact the customer to confirm savings are being realized and program dollars are well-spent.

Effective Dates:

Rule Source:

## 8. Regulatory Compliance and Reporting

### 8.1. Timing of Payments and Claims

Details: Programs must provide a schedule of when payments and claims will be made. Payments tied to performance should be made after at least a sufficient amount of monitoring time, and within a reasonable amount of time of implementation, so that the risk of over or underpayment for claimable savings is mitigated. Programs will likely vary the interval lengths based on the budget and nature of the interventions. Consideration should be given to the nature of the measures installed (e.g., weather-dependent energy savings should include heating and cooling seasons in determining the measurement payment period). Conversely, measures that affect only baseload may only require three months for payment determination, but the energy savings determination should be trued up at the end of the requisite measurement period to verify persistence of savings.

Effective Dates:

Rule Source: N/A

### 8.2. Systems of Record

Details: All data needed for program evaluation must be contained on PG&E servers before a claim is made. Data stored in this manner should be sufficient to replicate savings results; neither PG&E nor an evaluator should have to receive data from a third party in support of an impact evaluation.

Energy Insight (PG&E's project tracking database) should house as much project specific information as possible to facilitate future evaluations. Larger amounts of tabulated data (e.g. interval-level savings determination, usage, and weather data) should be housed in Teradata (PG&E's data storage warehouse).

Effective Dates:

Rule Source: N/A

### 8.3. Energy Insight Documentation

Details: Data shall include:

- Project ID, or other unique project identifier
- Service Agreement ID
- Site contact's name, address, email, and phone number
- Measures installed

- Measure cost
- Date measure implementation began
- Date measure implementation completed

Each program must also document specific project information in Energy Insight for evaluation purposes. This information varies by program but serves to facilitate the program's evaluation. Examples of such information may include:

- Project cost (note: different from measure cost)
- Year of building construction
- Square footage
- Contractor performing installation

Additional data collection requirements for evaluation purposes must be discussed and finalized prior to program launch and prior to any contract approval.

Effective Dates:

Rule Source: N/A

## 9. Other