

Draft Common Glossary for 2017 California Program Administrator Business Plans

Glossary Development Notes:

- *Red text is from Facilitator to reflect questions arising during the compilation of the various definitions from several sources or proposed language for selected terms.*
- *~75% of definitions are from Version 5 of the **CA Policy Manual**. A few clearly outdated or unneeded terms were removed.*
- *Many of the remaining 25% come from a previous draft Busienss Plan Terms document discusse at the May 19th CC meeting, which was further expanded draft and discussed briefly at the 10/19/16 CC meeting.*
- *A few definitions were borrowed from certain draft Business Plans (these are called out in bracketed citations at the end of those definition).*
- *Under term "Intervention Strategies" the question is raise about whether we should include in this glossary the defitions of all the various intervention strategies listed in the PA Metrics Tables 8-30-16. This metrics document was reportedly never established as a consensus definitions document, so we have not folded those definitions in yet.*
- **Comments and additions welcome to facilitator@caeccc.org.**

Advanced Technologies -- Measures or processes which exceed the efficiency or thermodynamic performance of standard energy using equipment or processes.

Affiliate -- Any person, corporation, utility, partnership, or other entity 5% or more of whose outstanding securities are owned, controlled, or held with power to vote, directly or indirectly either by an administrator or any of its subsidiaries, or by that administrator's controlling corporation and/or any of its subsidiaries as well as any company in which the administrator, its controlling corporation, or any of the administrator's affiliates exert substantial control over the operation of the company and/or indirectly have substantial financial interests in the company exercised through means other than ownership. For purposes of these Rules, "substantial control" includes, but is not limited to, the possession, directly and indirectly and whether acting alone or in conjunction with others, of the authority to direct or cause the direction of the management of policies of a company. A direct or indirect voting interest of five percent (5%) or more by the administrator, its subsidiaries, or its affiliates in an entity's company creates a presumption of control.

Avoided Costs -- Avoided costs refers to the incremental costs avoided by the investor-owned utility when it purchases power from qualifying facilities, implements demand-side management, such as energy efficiency or demand-response programs, or other wise defers or avoids generation from existing/new utility supply-side investments or energy purchases in the market. Avoided costs also encompass the deferral or avoidance of transmission and distribution-related costs. (D.08-01-006, Footnote 2)

Baseline Data -- The state of performance and/or equipment that what would have happened in the absence of the program induced energy efficiency.

Benchmarks -- Per the May 2, 2016 guidance, "Benchmarking is a logical component of a Business Plan; it allows measurement against industry standards and practices." These are used as a comparison to actual program performance. (See also Program Targets)

CEESP Strategies: [Not clear we should keep this term/definition]

The term "Strategies" was officially used in the California Energy Efficiency Strategic Plan (CEESP). Within each chapter in the CEESP, there are three to six key strategies described by the CPUC. These are accepted as guidance towards the Program Administrators (PAs) (and other market actors). Examples of CEESP Strategies for the Residential Sector include:

- Customer Demand
- Financing (and other incentives)
- Comprehensive Solutions
- Building Innovation
- Statewide Solutions
- Codes and Standards

Coincident Peak Demand -- The metered or estimated demand of a device, circuit, or building that occurs at exactly the same time as the system peak for a given year and weather condition.

Community Choice Aggregators -- Organizations created by local governments pursuant to Assembly Bill 117 for the purpose of procuring power and administering energy efficiency programs on behalf of local citizens.

Competitive Solicitation -- The process whereby parties are requested to submit bids offering innovative approaches to energy savings or improved program performance.

Conservation -- Reduction of a customer's energy use achieved by relying on changes to the customer's behavior which may result in a lower level of end use service.

Conservation Measures -- Activities and/or behaviors aimed at reducing energy consumption.

Conservation Programs -- Programs which are intended to influence customer behavior as a means to reduce energy use.

Cost Effectiveness -- An indicator of the relative performance or economic attractiveness of any energy efficiency investment or practice when compared to the costs of energy produced and delivered in the absence of such an investment.

Cream Skimming -- Cream skimming results in the pursuit of a limited set of the most cost-effective measures, leaving behind other cost-effective opportunities. Cream skimming becomes a problem when lost opportunities are created in the process.

Cross Subsidization -- Benefits enjoyed by one group, such as a customer class, which are funded by another group.

Custom Measures/projects -- Energy efficiency efforts where the customer financial incentive and the ex ante energy savings are determined using a site-specific analysis of the customer's facility (D.11-07- 030 page 31).

Customer -- Any person or entity that pays an electric and/or gas bill to an IOU or CCA and that is the ultimate consumer of goods and services including energy efficiency products, services, or practices.

Cumulative Savings -- As clarified in D.07-10-032, cumulative savings represent the savings in that year from all previous measure installations (and reflecting any persistence decay that has occurred since the measures were installed) plus the first-year savings of the measures installed in that program year.

Deemed Measure -- A prescriptive energy efficiency measure.

Delayed Installation -- Products which are claimed as installed in a specific quarter but are likely to be installed at a later date (D.11-07-030, page 21).

Downstream – a Market Channel relating to programs or elements thereof that primarily address contractor, installer, or end-user customer's purchase, installation, or use of high efficiency products and practices, in contrast to the Midstream or Upstream. [initial proposed term based on [source *Decision 16-08-019 August 18, 2016*]

Downstream Incentives -- Incentives provided to contractor, installer, or end-user customer for purchase, installation, and/or use of high efficiency products and practices, which are provided to customers as rebates. [initial proposed term based on [source *Decision 16-08-019 August 18, 2016*]

Dual Test -- The requirement that an energy efficiency activity pass both the TRC and the PAC cost- effectiveness test. [has this been tweaked in recent decisions?]

E3 Calculator -- The E3 calculator is a model developed by Energy Environmental Economics (or "E3" for use by the IOUs to map Commission-adopted avoided costs to energy efficiency programs for cost-effectiveness calculations.

Effective Useful Life (EUL) -- An estimate of the median number of years that the measures installed under the program are still in place and operable.

Electricity Savings -- Reduced electricity use (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which usually reduce energy use by reducing the quantity or quality of the baseline energy services demanded.

Emerging Technologies-- New energy efficiency technologies, systems, or practices that have significant energy savings potential but have not yet achieved sufficient market share (for a variety of reasons) to be considered self sustaining or commercially viable. Emerging technologies include late stage prototypes or under-utilized but commercially available hardware, software, design tools or energy services that if implemented appropriately should result in energy savings.

End Use – 1) The purpose for which energy is used (e.g. heating, cooling, lighting). 2) A class of energy use that an energy efficiency program is concentrating efforts upon. Typically categorized by equipment purpose, equipment energy use intensity, and/or building type.

Energy Efficiency -- Activities or programs that stimulate customers to reduce customer energy use by making investments in more efficient equipment or controls that reduce energy use while maintaining a comparable level of service as perceived by the customer.

Energy Efficiency Measure -- An energy using appliance, equipment, control system, or practice whose installation or implementation results in reduced energy use (purchased from the distribution utility) while maintaining a comparable or higher level of energy service as perceived by the customer. In all cases energy efficiency measures decrease the amount of energy used to provide a specific service or to accomplish a specific amount of work (e.g., kWh per cubic foot of a refrigerator held at a specific temperature, therms per gallon of hot water at a specific temperature, etc). For the purpose of these Rules, solar-powered, non- generating technologies are eligible energy efficiency measures (D.09-12-022, OP 1).

Energy Efficiency Programs -- Programs that reduce customer energy use by promoting energy efficiency investments or the adoption of conservation practices or changes in operation which maintain or increase the level of energy services provided to the customer.

Energy Efficiency Savings -- The level of reduced energy use (or savings) resulting from the installation of an energy efficiency measure or the adoption of an energy efficiency practice, subject to the condition that the level of service after the investment is made is comparable to the baseline level of service. The level of service may be expressed in such ways as the volume of a refrigerator, temperature levels, production output of a manufacturing facility, or lighting level per square foot.

Evaluation, Measurement and Verification (EM&V) -- Activities that evaluate, monitor, measure and verify performance or other aspects of energy efficiency programs or their market environment.

Evaluation Project Budget -- The project level evaluation budget as it is defined by the program administrators or Energy Division for internal program budgeting and management purposes. Inclusive of direct and allocated overhead and costs (+/-) recovered from other sources.

Ex Ante Values -- Estimated savings values calculated based on assumptions prior to the evaluation of the portfolio cycle. These savings reflect the IOU reported savings, which are trued up with final evaluation.

Ex Ante Review -- The review process that occurs before savings for a measure or project savings claim is "frozen" to verify that the ex ante values used to calculate the reported savings are reasonable and based on best available information.

Financial Incentive -- Financial support (e.g., rebates, low interest loans, free technical advice) provided to customers as an attempt to motivate the customers to install energy efficient measures or undertake energy efficiency projects. (See Rebate)

Free Drivers -- A free driver is a non-participant who adopted a particular efficiency measure or practice as a result of a utility program. (From April 2006 EM&V Protocols)

Free riders (Free Ridership) -- Program participants who would have installed the program measure or equipment in the absence of the program.

Fuel Substitution -- Programs which are intended to substitute energy using equipment of one energy source with a competing energy source (e.g. switch from electric resistance heating to gas furnaces).

Funding Cycle -- Period of time for which funding of energy efficiency programs have been approved by the Commission.

Gas Savings -- Reduced natural gas usage (or savings) produced by either energy efficiency investments which maintain the same level of end use service or conservation actions which can reduce energy use by reducing the quantity or quality of the baseline services provided.

Gross Savings -- Gross savings count the energy savings from installed energy efficiency measures irrespective of whether or not those savings are from free riders, i.e., those customers who would have installed the measure(s) even without the financial incentives offered under the program. Gross savings are adjusted by a net-to-gross ratio to produce net savings, that is, to remove the savings associated with free riders.

Gross Realization Rate -- Gross Realization Rate (GRR) is the ratio of achieved energy savings to predicted energy savings; as a multiplier on Unit Energy Savings, the GRR takes into account the likelihood that not all Commission-approved projects undertaken by IOUs will come to fruition.

Hard to Reach (HTR) -- Those customers who do not have easy access to program information or generally do not participate in energy efficiency programs due to a language, income, housing type, geographic, or home ownership (split incentives) barrier. These barriers are defined as:

- Language – Primary language spoken is other than English, and/or

- Income – Those customers who fall into the moderate income level (income levels less than 400% of the federal poverty guidelines and/or
 - Housing Type – Multi-family and Mobile Home Tenants, and/or
 - Geographic – Businesses in areas other than the San Francisco Bay Area, San Diego area, Greater Los Angeles Area (Los Angeles, Orange, San Bernardino, Riverside and Ventura counties) or Sacramento, and/or
 - Home Ownership – Renters
- [source: SoCalREN Residential Chapter—same as Policy Manual] *(may need to conform this to latest discussion in CAEECC 12/7/16)*

Incremental Measure Cost -- The additional cost of installing a more efficient measure calculated from the price differential between energy-efficient equipment and services and standard or baseline state. These costs include any direct or indirect incremental cost that is attributable to the energy efficiency activity. This may include design assistance, surveys, materials and labor, commissioning costs, etc.

Indicators -- These are items that are monitored to help understand performance and achievement of metrics. Program Administrators are not judged on Indicators, but are expected to report any requested Indicators to help understand the full story behind the metrics.

Short-term 1-3 years

Mid-term 4-7 years

Long-term 8-10+ years

[not sure if there is full consensus on these time periods above]

Information & Education -- Information and education programs can provide a wide range of activities designed to inform or educate a customer or customer group. Generally these range from in-depth, one-on-one, on-site or centrally located classroom style instruction in topics related to energy efficiency, to programs that target information to specific types of customers, to general information provided to a wide range of customers, to short inexpensive public service announcements on FCC approved communication frequencies. Programs intended to provide customers with information regarding generic (not customer- specific) conservation and energy efficiency opportunities. For these programs, the information may be unsolicited by the customer.

Innovation Incubator -- A low-cost, stand-alone program designed to grow innovative energy saving programs and processes for the larger portfolio over the long term. The incubator funds new program ideas that meet reasonable scientific scrutiny for potentially cost-effective energy savings and peak reduction.

Installation Rate -- Installation Rate is the ratio of the number of verified installations of a measure divided by the number of claimed installations rebated by the utility during a claim

period. Typically Installation Rates used on an ex ante basis will be based upon previous ex post evaluations.

Institutional Barriers -- A type of market barrier: In this case, the internal organizational hurdles that inhibit the evaluation and or choice to take energy efficiency actions.

Intervention Strategies or Program Interventions: Also referred to as “sector-specific strategies.” Within the Business Plans, the term Interventions refers to the categories of tactics (See also Tactics) used within a sector or program (both will use multiple interventions).

Interventions are more flexible than CEESP Strategies and can adapt to specific market conditions..

Alternate 1: PG&E

Intervention Strategy: A deliberate effort by PAs to intervene in the market to reduce market barriers and thereby change the level of investment in (or practice of) energy efficiency. Within the business plans, the term intervention refers to the categories of tactics used within a sector or program. As such, multiple tactics reside within each intervention. Interventions can adapt to specific market conditions, but do not change often.

[Do we want to include interspersed in this glossary or link to Attachment: Intervention Strategies Descriptions (from PA Metrics Tables 8-30-16) pasted in next page below from Source Documents section below. Is there enough agreement on those terms among the PAs?]

Possible Alternative to full metrics table list is shorter PG&E 10 list shown in their supplemental draft, excerpted below:

- **Data analytics** for strategically targeting high-opportunity projects and providing targeted value propositions
- **Data access** for customers and communities to meet AB 758 objectives
- **Technical assistance and tools** for customers to ensure that they have access to benchmarking and are aware of energy management technologies provided by the utilities, as directed by AB 793
- **Financial solutions such as rebates and loans** for customers to help overcome first-cost barriers
- **Outreach and education-related activities such as community social marketing** to raise awareness and broaden engagement with energy efficiency
- **Training for mid-stream market actors** to increase the skills of the workforce
- **Upstream and midstream activities to support EE equipment** and transform end use areas such as lighting and plug load-related markets
- **Incentives for the design community** to support ZNE goals in both the residential and commercial sectors
- **Strategic partnerships** to leverage existing markets to help scale efficiency and meet SB 350 goals
- **New models** such as pay-for-performance and Strategic Energy Management that will also help scale efficiency to meet SB 350 goals, and extract energy savings under AB 802 where there was stranded potential

Program Intervention Strategies Descriptions	
Partnering	<p>Will create limited-partnerships, deployed on an as needed basis that is intended to:</p> <ul style="list-style-type: none"> • increase the number of customers adopting energy efficiency; • promote deeper, comprehensive energy efficiency; • simplify customer engagement; and • reduce program costs through a cost-sharing partner model based on equitably sharing of customer incentives and administrative costs among partners
Utility Partnering	Facilitate the co-delivery of key program intervention strategies among gas and electric investor-owned utilities, publicly-owned utilities, program administrators, and water agencies.
Industry Partnering	Partnering will also be deployed, on an as needed-basis, among industry associations to promote EE solutions to a represented customer group.
Strategy: Intelligent Outreach	To assist customers in identifying the greatest EE opportunities, improve cost efficiency in program delivery, segment-specific benchmarking and provide deeper, comprehensive energy savings solutions.
Data analytics	Leverage AMI data to quickly and efficiently target facilities with the highest EE potential for customer. This will assist in encouraging the uninterested commercial customer with the opportunity for immediate and direct financial benefits by incorporating energy efficiency into their operations. Benchmarking by segment and size will be a key element to this strategy.
Virtual energy audits	As a result of data analytics, energy audits will recommend both optimization and O&M measures to decision-makers and facilities staff. O&M and optimization EE opportunities will be presented to facility staff to implement for immediate and persistent energy savings along with necessary training and education to permanently change the customer's behavior. Consumer-friendly, on-going communication to inform the customer on their progress in maintaining and/or increasing EE levels within their facilities.
Facility energy audits	Offers onsite comprehensive assessments to identify EE opportunities and traditional data driven interactive tools designed to engage and motivate customers to reduce their energy consumption through customized program recommendations.
Energy management technology	Leverages emerging energy management technologies to assist customers in actively managing their energy remotely. This will include merging AMI technology with advanced energy efficiency and management technologies to permanently modify residential customer behavior which will result in reliable energy efficiency savings. These technologies will also focus on appliances that can assist the customer to manage their energy including proper maintenance of appliances (e.g., HVAC self-diagnostic technology) to achieve optimal efficiency. Where practicable, the strategy will also partner with electric and water agencies with AMI technologies to provide a simple, one-touch efficiency experience.
Strategy: Small Business Outreach	Targets small and medium-sized customers by applying data analytics, including a focus on rural and non-English speaking business owners, to help the customer understand how specific energy efficiency equipment retrofits (e.g., boilers), O&M, and optimization EE changes, based on their own unique energy usage profile, can improve their business operations. The smaller commercial customers tend to either use natural gas as part of their business (e.g., food service) and those who don't (small consumer). The small commercial outreach strategy, in concert with the data analytics strategy, will group these customers accordingly and approach them differently. The larger consuming small business customers will be approached with similar program strategies as the larger commercial customer along with a more comprehensive direct install offering. The small consuming commercial customer typically uses natural gas similar to a residential customer (e.g., water and space heating). As such, the appropriate residential program strategies will be directed at these lower energy consuming customers.

Strategic Energy Management (SEM):	SEM is a proven program intervention strategy in achieving deeper and permanent energy efficiency levels in the commercial sector through improved customer operations and maintenance practices and EE equipment installations. SEM provides long-term consulting services for educating and training participating businesses' staff to do the following: (1) develop and implement a long-term energy planning strategy; and (2) permanently integrate energy management into their business planning at all organizational levels, from the shop floor to corporate management.
Pay-for-performance incentives based on measure energy savings.	SEM design requires a multi-year customer engagement in order to permanently reshape customer operational behaviors. Continuous monitoring of energy usage confirms the energy savings realized by the SEM program strategy. By offering a multi-year pay-for-performance incentives based on realized energy savings will balance the customer need for greater operational efficiency and ensure ratepayer benefit.
Modified savings analysis.	SEM will utilize a "bottom up" approach of enumerating measures to demonstrate the impact of SEM on the customer operations. This is a cost efficient method of validating the integration and impact of SEM on other EE programs and can satisfy the objective of attributing energy savings to the practice of continuous energy improvement. More frequent collection of energy and operating data (e.g., statistical power analysis) does not always improve baseline correlations in support of the whole building approach.
Reliance on AMI data and customer production data at the appropriate frequencies.	When estimating energy savings with regression, the probability of detecting savings increases with higher data frequency. Savings are more likely to be detected with daily or weekly data than monthly data. Also, the confidence intervals are likely to be smaller with daily or weekly data than monthly data. With the growing availability of AMI data, SEM will look to leverage AMI data along with necessary customer production data (simple, limited data requirements through centralized website). The statistical power analysis will provide guidance as to what data interval is most appropriate for a site.
Recognize the impact of recent EE equipment installations	When SEM models the O&M measure savings, the program will account for recent EE equipment installations made by the customer and adjust the energy savings projections accordingly. This approach will be effective in adjusting energy savings when both the EE equipment and the O&M changes occur during the same period.
Recognize customer production events.	SEM will be offered to customer after the completion of any renovations or major changes to plant operations, when appropriate.
Leverage customer engagement to	SEM's multi-year engagement allows an opportunity to promote other EE offerings and other DSM offerings (demand response) as well as clean renewable opportunities.
Meter large capital projects.	When the customer implements both capital and O&M measures during the same time period, the program may employ metering of the capital project(s) to identify capital EE savings separately from O&M EE savings.
Re-estimate first year energy savings for sites	With data for additional periods (months, weeks, days, etc.) in the second year, it may be possible to detect savings in the first year. SEM will re-estimating the first-year savings for sites with small first year energy savings.
Cohort approach for small and medium-	Commercial buildings that use a property owner cohort model to encourage engagement, awareness, value, and implementation of improvements to buildings including capital, operational, and behavior. Cohorts will be designated

Customer Incentives	Facilitates customer choice by offering a simplified suite of financial incentives strategies to customers (and/or their ESCO) to reduce the high first cost barrier, the key market barrier for most customers. Although incentive-based strategies like pay-for-performance appeal to larger EE projects, in many circumstances, the deemed and customized incentive one payment strategies are very effective in motivating the customer to install EE equipment. The following strategies will be offered in combination with other program strategies to encourage deeper, more comprehensive energy efficiency solutions and permanent EE behavior modification.
Pay-for-performance	strategy targets more comprehensive EE projects including new construction. Customers will be encouraged to work with energy service providers (ESCOs), if needed, to participate in a pay-for-performance (PFP) strategy. The PFP strategy will provide for incentive payments to the participating customer over a pre-determined time period on preset payment intervals based on measured savings, using normalized meter data, with a baseline of existing conditions associated with O&M and behavioral actions and equipment retrofits.
Customized incentives	strategy offers financial incentives for customized retrofit EE projects. The program offering features incentives based on calculated energy savings for measures installed as recommended by comprehensive technical and design assistance for customized retrofits and new construction. It offers a calculation method that can consider system and resource interactions, to support an integrated, whole system, and multi-resource management strategies.
Deemed incentive	strategy offers financial incentives based on predetermined (aka, deemed) energy savings. It also features rebates per unit measure for installed energy-saving projects and provides the IOU, equipment vendors, and customers a simple transaction and encourages greater market adoption of emerging EE technologies and applications.
Bundled measure	strategy provides an integrated approach bundling various measures together to provide an all-inclusive solution to the customer based on customer profile (segment, size, energy usage) primarily for small/medium-sized customers. The bundled strategy will integrate education, financing, and technical assistance in support of the installation of EE measures.
Whole building	strategy is the process that views the building as a system, rather than collection of components, in which each system interacts with each other systems such as HVAC, the building envelope, and lighting. This strategy is also directed at the new construction segment by promoting integrated design through owner incentives, design team incentives, and design assistance to participants who design spaces that are energy efficient.
Direct Install	Offers a direct install (DI) strategy targeted primarily at small/medium-sized customers that will deliver natural gas energy efficiency solutions, with electric and water efficiency, where feasible, to achieve near-term measureable results. A comprehensive direct install (CDI) will extend beyond the standard commercial DI offering that provides a limited EE measure list. CDI is a more comprehensive DI strategy that relies on ratepayer funds, in part, and customer co-fund contributions and/or customer financing.
Standard Direct install	Targets small/medium-sized commercial customers by leveraging the intelligent outreach strategy that identifies facilities with the greatest EE opportunity. The standard direct install offering will provide low/no cost EE measures. DI will install gas EE measures along with other similar electric and water efficiency measures, where practicable.
Comprehensive DI	Encourages deeper energy savings by offering more comprehensive EE measures that are typically used by customer segment. CDI will offer qualified contractors that will engage directly with the customers to install measures. A co-pay option will be offered to the customer along with tailored on-bill repayment strategy to offset the initial cost of the EE equipment.
Midstream EE Equipment	offers midstream, deemed incentives that will be used to deliver common natural gas equipment (e.g., tankless water heating). This offering will be coupled with a comprehensive, co-pay direct install strategy that can effectively deliver on-demand installation by trained and qualified contractors.
Commercial Financing	rely upon various financing vehicles including on/off bill repayment solutions to encourage commercial customers to adopt deeper, more comprehensive energy efficiency solutions. For smaller customers, financing solutions will be encouraged to offset customer's financial contribution (e.g., co-pay) for an EE retrofit, such as comprehensive direct install, to overcome customer financial barriers.
Innovative Design	Will solicit for large (\$2+ million) program designs to reach deeper levels of energy efficiency in various segments within the sector programs including the commercial sector. The solicitations will be continuously offered through the Innovative Design for Energy Efficiency Application (IDEA365) solicitation in search of ways to capture EE savings in various segments within and among the commercial sector.
Emerging Technology Introduction	Actively introduce EE technology solutions that will be applicable to the customer sector and achieve customer adoption including a focus on technologies that can be used by small/medium customers.
Scaled Field Placement	Deliver scaled field placement of new and/or renewed EE technologies to demonstrate viability and applicability to targeted customer segment(s) for larger promotion to all applicable customers.
Demonstration Field Placement	Conduct selective demonstration field placement of new and/or renewed EE technologies to demonstrate viability and applicability to targeted customer segment(s) for larger promotion to all applicable customers.

Least Cost/Best Fit -- The procurement of cost-effective supply and demand-side resources that, regardless of ownership, meet capacity and energy deliverability requirements. Energy efficiency resources are constructed from the bottoms up approach that aggregates the demand and energy savings from various energy-saving measures and activities into applicable end-use categories such as space cooling, space heating, lighting, and refrigeration, in order to provide near- and long-term peaking, intermediate, and baseload requirements.

Levelized Cost -- An estimate of the annualized cost of installing an energy efficiency measure divided by the annual energy savings. Typically calculated by multiplying the incremental cost of the measure by capital recovery factor (function of discount rate and expected useful life of the measure) and then dividing by annual energy savings.

Load Management -- Programs which reduce or shift electric peak demand away from periods of high cost electricity to non-peak or lower cost time periods, with a neutral effect on or negligible increase in electric use.

Lost Opportunities -- Energy efficiency measures that offer long-lived, cost-effective savings that are fleeting in nature. A lost opportunity occurs when a customer does not install an energy efficiency measure that is cost-effective at the time, but whose installation is unlikely to be cost-effective if the customer attempts to install the same measure later.

Metric Baseline -- The minimum or starting point used to compare the metric progress to achieving stated target. *[source SoCalGas Appendix E]*

Market Channel -- The point of entrance in the marketplace by a program. (downstream, midstream, upstream)

Market Effect -- A market effect is a change in the structure or functioning of a market or the behavior of participants in a market that result from one or more program efforts. Typically these efforts are designed to increase in the adoption of energy-efficient products, services or practices and are causally related to market interventions. Market effects include reductions in energy consumption and/or demand in a utility's service area caused by the presence of the DSM program, beyond program related gross or net savings of participants. These effects could result from: (a) additional energy efficiency actions that program participants take outside the program as a result of having participated; (b) changes in the array of energy-using equipment that manufacturers, dealers and contractors offer all customers as a result of program availability; and (c) changes in the energy use of non-participants as a result of utility programs, whether direct (e.g., utility program advertising) or indirect (e.g., stocking practices such as (b) above or changes in consumer buying habits)." Participant spillover is described by (a), and non-participant spillover, by (b) and (c). Some parties refer to non-participant spillover as "free-drivers." (From EM&V Protocols, April 2006) *[Source: Policy Manual]*

Alternate: source 2016 Metrics development definitions

Market Effect -- A change in a market structure and/or market participant behavior that represents an increase in the adoption of EE products, services, or practices created by market interventions (i.e., program or government).

Market Transformation -- Decision (D.)09-09-047, defines market transformation as “long-lasting, sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where continuation of the same publicly-funded intervention is no longer appropriate in that specific market. Market transformation includes promoting one set of efficient technologies until they are adopted into codes and standards (or otherwise adopted by the market), while also moving forward to bring the next generation of even more efficient technologies to the market.” *[is this still current?]*

Measures – 1) Specific customer actions which reduce or otherwise modify energy end use patterns. 2) A product whose installation and operation at a customer’s premises results in a reduction in the customer’s on-site energy use, compared to what would have happened otherwise.

Midstream -- Market Channel relating to programs or elements thereof that primarily address distributor or retailers, in order to encourage their sales of high efficiency products and practices, in contrast to the Downstream or Upstream. *[initial proposed term based on [source Decision 16-08-019 August 18, 2016]*

Midstream Programs -- Programs that primarily addresses distributors or retailers in order to encourage their sales of high efficiency products and practices, in contrast to the Downstream or Upstream. *[initial proposed term based on [source Decision 16-08-019 August 18, 2016]*

Net savings -- The savings realized when free ridership is accounted for. The savings is calculated by multiplying the gross savings by the net to gross ratio.

Net to Gross Ratio -- A ratio or percentage of net program savings divided by gross or total impacts. Net to gross ratios are used to estimate and describe the free-ridership that may be occurring within energy efficiency programs.

Non-price Factors -- Those factors included in cost effectiveness tests, other than commodity prices and transportation and distribution costs, e.g., environmental factors.

Non-Resource Program -- Energy efficiency programs that do not directly procure energy resources that can be counted, such as marketing, outreach and education, workforce education and training, and emerging technologies.

Participant Test -- The Participant Test is the measure of the quantifiable benefits and costs to the customer due to participation in a program. Since many customers do not base their

decision to participate in a program entirely on quantifiable variables, this test cannot be a complete measure of the benefits and costs of a program to a customer. (See SPM link under Attachment A.)

Partnership -- Coordinated efforts of a utility and a local government or other entity to use the strengths of both parties to achieve energy savings goals.

Peak Demand, Reported (per OP 1 of D.06-06-063 as modified by D.12-05-015) -- The peak megawatt load reduction contained in the most recently adopted DEER used to estimate and verify peak demand savings values. The DEER method utilizes an estimated average grid level impact for a measure between 2 PM and 5 PM during a "heat wave" defined by a three consecutive weekdays for weather conditions that are expected to produce a regional grid peak event. DEER utilizes a 3-day "heat wave" that occurs on consecutive days in June through September such that the three consecutive days do not include weekends or holidays, and where the heat wave is ranked by giving equal weight to the peak temperature during the 72-hour period, the average temperature during the 72-hour period and the average temperature from noon – 6 PM over the three days. [\[recent updates to definition?\]](#)

Peak Demand-General (kW) -- The maximum level of metered demand during a specified period, such as a billing month, or during a specified peak demand period. Extremely high energy use, usually with reference to a particular time period.

Peak Savings- Coincident (kW) -- The estimated peak (e.g. highest) demand savings (MW or kW) from a program for a specific time, date, and location coincident with the forecasted system peak for a given area and a given set of weather conditions. This estimate must also include consideration of the likelihood that the equipment is actually on at the time of coincident peak. Usage of this definition: Resource planning- for making adjustments to forecasts of peak usage for understanding reserve margins and reliability purposes.

Peak Savings- Daily Average (kW) -- The average peak demand savings (kWh impacts/ # of hours in the peak rate period) for a given utility during their peak season. Example for SCE-Peak period is for summer weekdays from 12-6 PM. So - daily average savings would be the number of kWh saved/ # of kWhs saved for all weekday peak periods (= kWh/5 days/week * 12 weeks/summer* 6 hours/day = kW average. Usage: Cost effectiveness analysis, primarily for valuing energy savings that occur during the peak period using "peak" average avoided costs.

Peak Savings –Non coincident (kW) -- Estimated highest level of peak savings(kW or MW) for a given program during the peak time period for a given utility on the hottest day of a "normal" weather year. Thus if a group of measures saved 1MW at 2PM, 1.7 MW at 3PM, 1.6 MW at 4PM, 1.0 MW at 5 PM and 1.2 MW at 6 PM, the peak non coincident savings would be 1.7 MW. This savings estimate does not take into account how many of the affected devices or equipment will be operating during the peak time period. Usage: Cost effectiveness analysis and procurement.

Peer Review Group (PRG) -- A subset of the Program Advisory Group consisting of non-financially interested members who will review utility submittals to the Commission, assess overall portfolio plans, plans for bidding out pieces of the portfolio, and the bid evaluation criteria for selecting third-party programs.

Performance Uncertainties -- A market barrier: refers to new technologies or systems whose efficiency or system performance levels are uncertain due to lack of experience.

Portfolio -- All IOU and non-IOU energy efficiency programs funded by ratepayers that are implemented during a program year or cycle. May also refer to a group of programs sponsored, managed, and contracted for by a particular IOU.

Portfolio Reporting -- Regularly scheduled reporting by the portfolio administrators directly to the Commission. Metrics reported are: portfolio budgets and expenditures, measures installed, services rendered, and other program activity deemed relevant to Energy Division's responsibility to support the Commission's responsibilities of quality assurance, policy oversight, and EM&V.

Pre-commercialization -- A phase in the life of a product before it is readily available on the market.

Program -- A collection of defined activities and measures that:

- are carried out by the administrator and/or their subcontractors and implementers,
- target a specific market segment, customer class, a defined end use, or a defined set of market actors (e.g. designers, architects, homeowners),
- are designed to achieve specific efficiency related changes in behavior, investment practices or maintenance practice in the energy market,
- and are guided **by a specific budget and implementation plan.**

Program Activities -- Any action taken by the program administrator or program implementer in the course of implementing the program.

Program Administrator -- An entity tasked with the functions of portfolio management of energy efficiency programs and program choice.

Program Administrator Cost (PAC) Test -- Under portfolio evaluation of cost effectiveness, the PAC test contains the program benefits of the TRC test, but costs are defined differently to include the costs incurred by the program administrator but not the costs incurred by the participating customer. (See the Standard Practice Manual.)

Program Advisory Group (PAG) -- Advisory groups for each utility service area composed of energy efficiency experts representing customer groups, academic organizations, environmental organizations, agency staff and trade allies in the energy market.

Program Approach -- This is the combination of intervention strategies and tactics deployed within a Program. *Seems that this is replaced with Program Strategy*

Program Cycle -- The period of time over which a program is funded and implemented.

Program Implementation Plan -- A detailed description of a program that includes program theory, planned program processes, expected program activities, program budget, projected energy savings and demand reduction and other program plan details as required by the Commission, assigned ALJ, or Energy Division. This document is being replaced for future plans with a combination of "Implementation Plans" and "Business Plans".

Program Implementers -- An entity or person that puts a program or part of a program into practice based on contracts or agreements with the portfolio manager.

Program Intervention -- a deliberate effort by utilities to intervene in the market to reduce market barriers and thereby change the level of investment in (or practice of) energy efficiency. An intervention's success in reducing market barriers, therefore, hinges on whether it leads to or causes a net beneficial outcome from a societal perspective. *[source SoCalGas Draft Business Plan, Appendix E]*

Program Intervention Metrics: The specific indicator used to measure progress towards achieving desired Program Intervention impacts. Program Intervention Metrics will be measured at the program level and are not included in the business plan. The metric is not the goal or target, but instead defines what characteristics or unit of activities of the Program are measured against Success Criteria (i.e., goals or targets).

Program Strategy -- The set of activities deployed by the program in order to achieve the program's objectives.

Program Targets: The quantitative goal towards which a program level metric tracks progress. Program metrics and targets can be used with both program-level outputs and program-level outcomes, whichever is more useful to the PA. These will most likely include either high, medium and low targets or short and long-term targets.

Program Year(s) -- The calendar year(s) during which the program operates.

Ratepayer -- Those customers who pay for gas or electric service under regulated rates and conditions of service.

Rebate -- A financial incentive paid to the customer in order to obtain a specific act, typically the installation of energy efficiency equipment.

Remaining Useful Life (RUL) -- An estimate of the median number of years that an measure being replaced under the program would remain in place and operable had the program intervention not caused the replacement.

Report Month -- The month for which a particular monthly report is providing data and information. For example, the report month for a report covering the month of July 2006, but prepared and delivered later than July 2006, would be July 2006. *[may not need this]*

Resource Programs -- Energy Efficiency programs that generate energy savings that are quantified and tracked by program administrators.

Resource Value -- An estimate of the net value of reliable energy (e.g., kWh, therms) and capacity (e.g., kW, Mcfd) reductions resulting from an energy efficiency program. This includes the net present value of all of the costs associated with a program and all of the estimated benefits (both energy and capacity). The calculation of resource value and associated benefits should be consistent with the avoided costs adopted in the most recent Commission proceeding or otherwise provided for by the Commission.

Savings Decay -- The reduction of cumulative savings due to previous measure installations passing their Remaining Useful Life or Effective Useful Life. Per D.09-09-047 and until EM&V results inform better metrics, IOUs may apply a conservative deemed assumption that 50% of savings persist following the expiration of a given measure's life.

Sector -- There are six defined sectors within the CPUC directive, each with their own business plan. These include Residential, Commercial, Public, Industrial, Agricultural and Cross-Cutting. The Cross-cutting sector includes three specific areas; Workforce, Education & Training, Emerging Technologies Program, Finance(?), and utility-specific ME&O.

Sector Metrics -- The specific Indicator used to measure progress towards achieving desired market effect(s). Directionality, goals, and time frame, which the metric is used to measure, are defined by the Success Criteria associated with that metric (See Success Criteria). For the purpose of developing EE business plans, sector metrics only reflect the PA program intervention strategies, and rely on readily available data to allow for active monitoring by PA of progress towards achieving desired market effect.

Sector-Specific Strategies -- See Intervention Strategies, above.

Sector Targets -- The quantitative goal towards which a sector metric tracks progress. Sector metrics and targets can be used with both sector-level outputs and sector-level outcomes, whichever is more useful to the PA. [need to resolve whether Sector Targets is identical to, overlapping or distinct from Sector Goals?]

Service Area -- The geographical area served by a utility.

Short Term/Long Term -- Planning terms referring to the timing or expected timing of program activities, program impacts, or program funding. Short term indicates program activities, program impacts, or program funding that occurs during the current program cycle. Long term indicates program activities, program impacts, or program funding that occurs beyond the current program cycle. [suggest deletion of this ter]

Source-BTU Consumption -- Conversion of retail energy forms (kWh, therms) into the BTU required to generate and deliver the energy to the site. This conversion is used to compare the

relative impacts of switching between fuel sources at the source or BTU level for the three-prong test required for fuel-substitution programs.

Standard Practice Manual (SPM) -- The California Standard Practice Manual: Economic Analysis of Demand-side Programs and Projects is jointly issued by the California Public Utilities Commission and the California Energy Commission. The SPM provides the definitions for the standard cost effectiveness tests and their components used for energy efficiency programs. SPM tests are further clarified in Commission Decisions as cited in the Cost-Effectiveness Rules in this Policy Manual.

Statewide -- A program or subprogram that is designed to be delivered uniformly throughout the four large Investor-Owned Utility service territories. Each statewide program or subprogram should be consistent across territories and overseen by a single lead program administrator. One or more statewide implementers, under contract to the lead administrator, should propose the design and deliver the program or subprogram in coordination with the lead program administrator. Local or regional variations in incentive levels, measure eligibility, or program interface are not generally permissible (except for measures that are weather dependent or when the program administrator has provided evidence that the default statewide customer interface is not successful in a particular location). Upstream (at the manufacturer level) and midstream (at the distributor or retailer level, but not contractor or installer) interventions are required to be delivered statewide. Some, but not all, downstream (at the customer level, or via contractors or installers) approaches are also appropriate for statewide administration. Statewide programs are also designed to achieve market transformation. [*source Decision 16-08-019 August 18, 2016*]

Strategic Initiatives -- Within the Business Plan, this term will be used more generally, consistent with standard use of the term. This will not be used to point to one specific level. The CPUC or the program administrators may have strategic initiatives at several different levels.

Subprogram – *[to be defined as we resolve the definition of "Program" above.]*

Tactics -- An action embodied within a program to carry out an intervention strategy. For example, social marketing may be a specific tactic for an engagement intervention.

Alternate 1: PG&E

Tactics: An action embodied within a program to carry out a program intervention strategy. A tactic, therefore, is an action carefully planned to achieve the intervention strategy. There are multiple tactics within an intervention. The underlying tactics in which the program engages may change dramatically over time in an attempt to successfully intervene.

Third Party Program -- To be designated as "third-party," a program must be proposed, designed, implemented, and delivered by non-utility personnel under contract to a utility

program administrator. This definition is not intended to apply to non-utility program administrators. [source *Decision 16-08-019 August 18, 2016*]

Total Resource Cost Test (TRC) -- The TRC test measures the net resource benefits from the perspective of all ratepayers by combining the net benefits of the program to participants and non-participants. The benefits are the avoided costs of the supply-side resources avoided or deferred. The TRC costs encompass the cost of the measures/equipment installed and the costs incurred by the program administrator. (See Standard Performance Manual)

Unit Energy Consumption -- Unit Energy Consumption (UEC) is the expected annual energy consumption of a technology, group of technologies, or process.

Unit Energy Savings -- Unit Energy Savings (UES) is the estimated difference in annual energy consumption between a measure, group of technologies or processes and baseline, expressed as kWh for electric technologies and therms for gas technologies

Upstream – relating to programs or elements thereof that primarily address manufacturers or retailers in order to encourage their production and sales of high efficiency products, in contrast to the Midstream or Downstream. [initial proposed term based on [source *Decision 16-08-019 August 18, 2016*]

Upstream Incentives -- Incentives provided to manufacturers in order to encourage their production and sales of high efficiency products, in contrast to the downstream incentives, which are provided directly to customers as rebates. [source *Decision 16-08-019 August 18, 2016*]

Workpapers -- Documentation prepared by the program administrators or program implementers that documents the data, methodologies, and rationale used to develop ex-ante estimates that are not in already fully contained in the Database for Energy Efficiency Resources (DEER) (D.10-04-029, footnote page 20).

Zero Net Energy (ZNE) -- Zero Net Energy is defined as the implementation of a combination of building energy efficiency design features and on-site clean distributed generation such that the amount of energy provided by on-site renewable energy sources is equal to the energy consumed by the building annually, at the level of a single “project” seeking development entitlements and building code permits. Definition of zero net energy at this scale enables a wider range of technologies to be considered and deployed, including district heating and cooling systems and/or small-scale renewable energy projects that serve more than one home or business. (D.07-10-032, Footnote 42.) [*has this been updated via t-24 or other CEC proceedings?*]

Draft 2017 California Program Administrator Business Plan Acronym List

AB – Assembly Bill

ASHRAE -- American Society of Heating, Refrigerating, and Air Conditioning Engineers

ACEEE -- American Council for an Energy-Efficient Economy

CALBO -- California Association of Building Officials

CARB -- California Air Resource Board

CBSC -- California Building Standards Commission CCTR Code Change Theory Report

CDMT -- Code-directed Market Transformation Energy Commission California Energy Commission

CPUC -- California Public Utilities Commission

DER -- Distributed Energy Resources

DOE -- United States Department of Energy

DR -- Demand Response

ED -- Energy Division

EE -- Energy Efficiency

EM&V -- Evaluation Measurement & Verification

EPA 2005 -- Energy Policy Act of 2005

EPCA -- Energy Policy and Conservation Act

EPIC -- Electric Program Investment Charge

ET -- Emerging Technologies

EUL -- Effective Useful Life

GHG -- Greenhouse gases

Green MLS -- Green Multiple Listing Service

GWP -- Global warming potential

HFC -- Hydrofluorocarbons

ICC -- International Code Council

IDER -- Integrated Distributed Energy Resources

IOU -- Investor Owned Utility

NEEA -- Northwest Energy Efficiency Alliance

NEEP -- Northeast Energy Efficiency Partnerships

NOMAD -- Naturally Occurring Market Transformation

NRDC -- National Resources Defense Council

PA -- Program Administrator

RASS -- Residential Appliance Saturation Study

RCx -- Retro-commissioning

RUL -- Remaining Useful Life

RPS -- Renewable Portfolio Standard

REN -- Regional Energy Network

SB -- Senate Bill

T&D -- Transportation & Distribution

TDV -- Time Dependent Value

TRC -- Total Resource Cost Test

US DOE -- United States Department of Energy – US may not be used

US EPA -- United States Environmental Protection Agency – US may not be used

US FTC -- United States Federal Trade Commission – US may not be used

UEC -- Unit Energy Consumption

ZNE -- Zero Net Energy

ZEV -- Zero Emission Vehicles

Sources: primarily from SoCalGas draft Business Plan.