



Attachment 1- Energy Division General Review and Finding for E3 Cost-Effectiveness Calculator Output files

FILED

12-12-08

04:56 PM

In its review of the utilities' E3 Cost-Effectiveness Calculator Output (E3) files for the 2009-2011 Energy Efficiency Portfolio Applications, Energy Division discovered additional concerns pertaining to the submitted E3 Output files. Energy Division has provided each utility a detailed list of concerns specific to its output files (See Attachment 1), and had discussions with each utility regarding these concerns. Per assigned Commissioner's and Administrative Law Judge's Ruling Requiring Supplemental Filings dated October 30, 2008, the utilities are directed to continue to work with Energy Division to resolve these issues and to correct all E3 Output concerns identified by Energy Division in the revised portfolios. The utilities are to correct their E3 Cost-Effectiveness Calculator inputs as described in the attached document and as further directed below:

Customized Measures

For all IOU portfolios, "customized" measures account for a significant portion of the total portfolio projected kWh, kW and/or therm savings. The cost effectiveness calculations (E3 calculator inputs) for these customized measures shall be subdivided into more specific measure groups to allow review. For example: HVAC equipment shall be subdivided into the major expected measure groups such as chillers, packaged air-conditioner, fans and pumps, or other appropriate measures; HVAC envelope shall be subdivided into windows, insulation, cool roofs, or other appropriate measure groups; interior lighting shall be subdivided into interior or exterior, linear fluorescent, CFLs, or other appropriate measure group; process shall be subdivided into pump off controllers, or other appropriate measure groups. The final groupings of these customized measures shall be approved by Energy Division prior to the IOU application resubmittal.

Measure Cost and Incentives Dollar Amounts

The cost effectiveness calculation (E3 calculator inputs) measure costs, including gross measure costs, all incentive costs, and participant costs shall be provided in a manner consistent with previous Rulings and Decisions. Energy Division, during its review of the IOU application E3 calculators observed many measures for which the participant cost was a negative value. As discussed in Commission Decision D.06-06-063, even in the rare case when an incentive exceeds the cost of an equipment purchase, a negative participant cost is not expected since costs other than the equipment purchase (such as installation, business interruption, or other participant costs related to the measure installation) are expected to result in a net positive participant cost. Negative participant cost in the TRC cost act to prevent the TRC cost from fully including all costs paid by the program and its participants by turning a positive incentive into a negative participant cost thus violating the direction of D.06-06-063. If any measure is submitted with a negative participant cost complete supporting documentation must be supplied that demonstrates that all costs are being correctly included in the TRC costs.

Specifically, the following general guidelines shall be followed with any exceptions fully documented in supporting workpapers:

Attachment 1- Energy Division General Review and Findings of Errors for E3 Cost-Effectiveness Calculator Output files

expected participant costs and specify a gross measure cost as the sum of the direct install plus participant costs. Direct install mechanisms include any activity where an IOU contractor or subcontractor to an IOU contractor directly installs the measure that is claimed; this includes services such as refrigerant charge adjustments, duct sealing, lighting fixture or lamp/ballast replacements, low flow shower heads, or any other equipment and/or services. DEER cost values may be available for measures such as refrigerant charge, duct sealing and lighting system upgrades, however, those measures delivered via direct installation shall utilize the IOU expected or contracted cost for the incentive direct install costs and specify any expected participant co-payment as the participant cost (or zero if no co-payment or participant paid cost is likely.)

- o Measures not classified as direct install, for which incentives are paid to a player other than a participating customer (so called “upstream” incentive programs) shall have a participant cost specified that reflects the expected actual customer cost, the incentive equal to the IOU program upstream incentive payment and a gross measure cost set equal to the sum of the participant cost plus the upstream incentive payment. An upstream lighting program CFL, for example, shall have the participant cost set to the expected store purchase price of the CFL lamp, the incentive cost shall be the expected IOU program payment to others, and the gross measure cost shall be set equal to the total participant plus incentive cost. The shelf price for consumer items such as CFLs shall include any delivery, tax or installation costs.

Measure Energy Impacts

As directed by the October 30, 2008, Assigned Commissioner’s and Administrative Law Judge’s Ruling Requiring Supplemental Filings:

In their refiled applications, the utilities shall use Energy Division approved Database of Energy Efficiency (DEER) 2008 planning values as the basis for a fully-developed base case scenario for 2009-2011 energy efficiency portfolio plans. We also require the utilities to use the 2008 DEER values as the basis for any additional scenarios that incorporate “utility preferred” policy proposals. The only exceptions will be for those small number of cases for which DEER values do not exist, in which case procedures outlined in the Energy Efficiency Policy Manual must be followed.

We clarify here that the DEER 2008 values referred to by the October 30, 2008 AC/ALJ Ruling are those found at the DEER website on the DEER2008 for 09-11 Planning page¹.

Load Shapes and TOU Adjuster

¹ The DEER website can be accessed at the URL <http://www.DEEResources.com> Once the user has logged onto the website the “DEER2008 for 09-11 Planning” page link can be followed to access the 09-11 planning NTG, EUL, cost and UES/loadshape values.

Attachment 1- Energy Division General Review and Findings of Errors for E3 Cost-Effectiveness Calculator Output files

As directed by the October 30, 2008 AC/ALJ Ruling, DEER loadshape shall be used when available. When no DEER loadshape is available the most appropriate available loadshape shall be selected.

The "TOU adjusters" adopted in D.06-06-063 apply only to small packaged HVAC a/c equipment replacements. However, all cases for which TOU adjusters would have previously been allowed are for measures which must now utilize DEER 2008 load shapes therefore the TOU adjuster percentages shall be set to zero.

EULs and NTGs

As directed by the October 30, 2008 AC/ALJ Ruling, DEER EUL and NTG values shall be used when available. When no DEER EUL is available the most appropriate available EUL shall be specified with supporting documentation as required by the Ruling. When no specific DEER 2008 measure or delivery channel NTG value is available the appropriate DEER default shall be used.

Early Retirement versus Replace-On-Burnout Measures

As stated in the Energy Efficiency Policy Manual (version 4) Rule IV.2

The TRC test uses the "incremental" measure cost (not the full cost) and incremental energy savings benefit (not the full energy savings benefit) when an energy-efficient appliance or measure promoted through the program is installed in lieu of the standard (less efficient) appliance/measure that would have been installed, without the utility EE activity. The TRC test uses the full measure cost (at the time of installation) and the full energy savings benefit (of the new measure) for the remaining useful life of the preexisting equipment (e.g., three or more years), where the utility EE activity causes measure/equipment to be replaced much earlier. The TRC test then uses the incremental savings for the balance of the effective useful life of the newly installed measure/equipment and deducts the full cost of that equipment discounted back to the date of the measure/equipment installation.

Retrofit and direct install measures may utilize full energy impacts rather than incremental impacts. This denotes that an early retirement or replacement (ER) of existing equipment is being assumed. As noted above, the CPUC policy allows the full savings to be claimed only for the remaining life (RUL) of the pre-existing equipment rather than the expected life (EUL) of the new equipment. The adopted DEER RUL is defined as one-third of the EUL. Past the RUL year the only savings claim allowed is the incremental savings above the standard equipment requirement or practice. In most cases the measure equipment is the same or similar to the equipment that would be required or expected at the RUL normal replacement time thus a zero savings past the RUL is expected; deviation from this expectation requires complete documentation in a workpaper.

Attachment 1- Energy Division General Review and Findings of Errors for E3 Cost-Effectiveness Calculator Output files

Additionally, as noted in the Policy Manual excerpt above, for early retirement the full cost of the equipment installation is used minus that full cost of the standard equipment (may be the same item and cost) discounted, from an assumed installation RUL years later, back to the current retrofit installation date.

Retrofit measures shall not mix the EUL and incremental costs for replace on burnout (ROB) assumptions with energy impacts for early replacement (ER) assumption.

Natural Gas Impacts

As directed by the October 30, 2008 AC/ALJ Ruling, DEER EUL and NTG values shall be used when available. For all indoor lighting, both residential and non-residential, and for residential appliances, DEER energy impacts include both electric and natural gas impacts. It is required that both electric and natural gas impacts be included in the inputs for cost effectiveness calculations.

(END OF ATTACHMENT 1)

Attachment 2- Issues with Southern California Edison 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

Source of data reviewed – 09-11 E3 planning calculator export file “2009-2011 SCE E3 Calculator - Total Portfolio - Base Scenario - Export File.xls” This file was provided to Energy Division via email by Darren Hanway on 23 July 2008 as a replacement for the file(s) submitted on 21 July 2008.

Customized Measures

Approximately half of the portfolio estimated non-residential kWh and thirty percent of portfolio estimated non-residential kW are attributed to “customized” non-residential measures. This translates into approximately one third of the portfolio estimated total kWh and kW impacts; a bit more than one third for the kWh and a bit less than one third for the kW. The NTG, EUL, kW and cost parameters for these measures are provided per kWh (approximately) of annual estimated impacts. No information is provided on the predominate measure type for these impacts other than the general categories such as “HVAC equipment”, “HVAC envelope”, “Interior Lighting”, “Process” for the majority of these measures. As submitted this category of measures are not reviewable. Further information is required for review to be completed.

Due to the size of this customized measure category, both in terms of its percentage of non-residential savings as well as portfolio savings, additional information is required. The customized measure category should be further subdivided into more specific measure groups to allow review. For example: HVAC equipment should be subdivided into the major expected measure groups such as chillers, packaged a/c, fans and pumps, or other appropriate measures; HVAC envelope should be subdivided into windows, insulation, cool roofs, or other appropriate measure groups; Interior lighting should be subdivided into interior or exterior, linear fluorescent, CFLs, or other appropriate measure group; process should be subdivided into pump off controllers, or other appropriate measure groups.

It is realized that the customized measure category represents measures for which savings calculations are made for each project based upon the specific measure to be installed and the customers’ specific site location and operation parameters. However, it is also known that most all these measures are custom calculated using software such as the SPC program software or the SBD (NR-NC) software and that those software programs provide detailed measure-by-measure savings estimates. A combination of program participation history information combined with projection of future participation should be utilized to provide customized measure parameters in a manner similar to that used for deemed measures; typical measure NTG, EUL, costs, incentives, kWh, kW and therm parameters must be provided to allow review of these assumptions. It is expected that a fraction of the customized process measure will not be able to be categorized in this manner due to a large number of smaller projects that are expected; however, it is expected that a majority of the process measures can also be categorized into a small number of more specific categories. For example, oil well pump off controllers are a major contributor to the 06-08 savings claims in the process category; those types of known measures should be individually reported as categories.

Attachment 2- Issues with Southern California Edison 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

Measure Cost and Incentives Dollar Amounts

Many values for gross measure cost, incentives and participant costs appear inconsistent. In many cases this inconsistency results in a negative participant cost that, as per D.06-06-063, is expected only rarely. However, this occurs in 10 out of 37 residential categories and a few non-residential categories.

For example, for refrigerator and freezer recycling, the gross measure cost is input as \$100.93 while the customer incentive is input as \$50 and the recycling contractor payment is input as \$88.57 resulting in a negative participant cost of \$37.64; it is expected that the gross measure cost for this item should be the sum of the customer rebate and the contractor payment such that the participant cost is zero. Additionally, if the recycled refrigerator/freezer has a residual value greater than the customer rebate (which seems to be a basic assumption of the program documentation) it would be expected that the participant cost would actually be greater than zero and equal to the residual value of the appliance minus the customer rebate.

Another example is the consumer electronics category that has a gross measure cost of \$0.46 specified along with a \$15.63 up-stream/mid-stream incentive resulting in a negative participant cost of \$15.17. It is expected that this gross measure cost would be at least equal to the \$15.63 incentive such that the participant cost would not be negative.

Similarly, for the residential interior screw-in CFL measure, a gross measure cost is entered as \$0.68 with incentives totaling \$2.21 resulting in a negative participant cost of \$1.53. In this case it appears that the average participating customer CFL purchase price, after an upstream or other rebate, is being entered as the gross measure cost when the gross measure cost would be the sum of the customer net purchase price plus upstream, mid-stream or POS rebates.

In the case of high impact measures that are a composite of upstream, mid-stream, direct install or down-stream programs those measures should be separated into multiple measures to allow review by delivery mechanism. High impact measures in this context would mean those which contribute several percentage points to the portfolio estimated savings total; this would include residential and non-residential CFLs (screw-in and fixtures), non-residential linear fluorescents, residential and non-residential new a/c, and other measures using multiple delivery mechanisms with similar percentage or high portfolio contribution.

Measure Energy Impacts

In many cases the entered energy impacts values are not easily compared to the DEER values for the measure. Additional information will be required to allow a review to confirm that DEER values were used as the basis for savings estimates for measures with DEER values available.

For example, residential screw-in CFLs are expected to use DEER values for kWh and kW using an in-service rate multiplier based on IOU best estimates of leakage outside the service area,

Attachment 2- Issues with Southern California Edison 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

customer storage rates, and lamp breakage or other loss such that the total savings estimates reflect DEER savings values for actual installations during the 2009-2011 cycle. However the input parameters for kWh and kW do not appear to be consistent with the DEER kWh and kW value and the average lamp wattage and in-service rate assumptions are not provided so as to allow a review of the input parameters. The entered values for residential screw-in CFLs are 32.3908461 kWh and 0.00520691 for a ratio of 0.16075 watts/kWh; this ratio range for DEER values has a low in climate zone 1 (almost no expected cooling) of about 0.13 and a high in climate zone 15 (very hot desert climate) of about 0.15 thus the SCE entered value appear to differ substantially from DEER. In a similar comparison for non-residential screw-in CFLs, the SCE input values provide a ratio of watts/kWh of about 0.229 while DEER typical ratios range from 0.12 to 0.25 thus the entered value seems to be at the high end of the possibilities indicating that the upstream lighting program somehow targets a subset of the non-residential building sector with the highest ratio of demand to energy use for lighting; this assumption requires added explanation.

For measures that represent a mix of efficiencies or sizes, such as lamp wattages, the average value should be provided along with other major assumptions used to turn the DEER value into the entered value. For measures that represent a mix of primary measure types, such as different fluorescent lighting system types, the primary measure type (such as T12 to T8 fixture replacement or T12 to T8 lamp and ballast replacement) should be supplied to allow more direct comparison to DEER values. This type of added information will be required to further review the submission.

Load Shapes and TOU Adjuster

Some selections for measure load shapes do not appear to be the most appropriate. For example, the residential customized other category has the "HorizAxisClothesWasher-RC" load shape selected, for the residential water heating other category the "AC_Cooling-RC" was selected, for the residential whole building customized measure the "Commercial Whole Building" load shape was selected, for the non-residential customized envelope measure the "DEER:HVAC_Refrig_Charge" load shape was selected. These selections require further explanation or update.

The "TOU adjusters" adopted in D.06-06-063 apply only to small packaged HVAC a/c equipment replacements for which TOU load shapes (not the DEER load shapes) are selected. However, all cases for which TOU adjusters were entered (and always with a value of 100%) are for measures which utilize DEER hourly rather than IOU TOU load shapes. These TOU adjuster percentages are expected to be zero rather than 100%.

EULs and NTGs

Although no values used for EULs or NTGs appear to be outside the ranges within DEER, many values are not equal to DEER values probably due to the measure groups using weight averaged EULs and NTGs. For DEEM measures which are in the high impact groups (as defined above) added information about the assumed composition of the group is required to

Attachment 2- Issues with Southern California Edison 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

allow review. For example, in the case of screw-in CFLs, the approximate fraction of upstream, down-stream, direct install, and specialty versus standard lamp types is needed to determine if correct NTGs and EULs have been assigned.

Early Retirement versus Replace-On-Burnout Measures

It appears that many retrofit measures utilize full energy impacts (the difference between pre-existing equipment consumption or demand compared to post-retrofit equipment consumption or demand) rather than incremental impacts (using the minimum code compliant replacement equipment rather than the pre-existing equipment consumption and demand as the baseline.) This full savings assumption normally means that the IOU program activity is causing an early retirement/replacement (ER) of existing equipment. Incremental savings assumptions are used for replace-on-burnout (ROB) retrofits; those retrofits planned by the participant independent of the program. In the case of early retirement the CPUC policy allows the full savings to be claimed only for the remaining life (RUL) of the pre-existing equipment rather than the expected life (EUL) of the new equipment. The adopted DEER RUL is defined as one-third of the EUL. Past the RUL year the only savings claim allowed is the ROB incremental savings above the standard equipment requirement or practice; if the retrofit equipment is the same performance as the code minimum or standard equipment then the incremental savings is zero past the RUL year. Additionally, for early retirement the full cost of the equipment installation is used minus that full cost of the standard equipment (may be the same item and cost) discounted, from an assumed installation RUL years later, back to the current retrofit installation date.

It appears that many retrofit measures in the submission are mixing EUL and costs for ROB assumptions with energy impacts for ER assumption. This seems the case for all florescent lighting system measures and perhaps many HVAC a/c and process measures. Further information on the ER versus ROB assumptions for lighting, HVAC and process measures is required for review or the EUL/RUL, costs and savings values should be adjusted to properly represent ER or ROB assumptions.

Natural Gas Impacts

All lighting measures as well as many HVAC (both equipment and envelope) measures have natural gas as well as electric impacts. Most lighting measures have a negative (added consumption) natural gas impact while many HVAC measures can have a positive (reduced consumption) natural gas impact. All these gas impacts will cause a change in the ratepayer avoided cost, however, the natural gas impacts will change the ratepayer gas avoided costs Southern California Gas rather than their electric avoided costs for Southern California Edison. It is required that both electric and natural gas impacts and the resultant ratepayer avoided cost be included in the inputs and TRC/PAC calculations.

(END OF ATTACHMENT 2)

Attachment 3- Issues with Pacific Gas and Electric 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

Source of data reviewed – 09-11 E3 Planning Calculator Export file “Scenario 2 Input-Output.xls”

This file was made available on PG&E’s website in the regulatory area on 22 July 2008.

Format and Content of Submission

The submission was not provided in compliance with the required (and extensively discussed and agreed upon) format; specifically, measure groupings were to be defined in a consistent manner across all IOUs with the submitted E3 Calculators using those commonly defined measure groups and naming conventions. Not all IOUs would use all common measure groups; the content of each IOU submission was to be based on those measures included in each IOU portfolio. A PG&E’s re-submission is required. In addition to re-submitting in the required format, PG&E’s re-submission should be guided by the additional comments in the sections below.

The PG&E submission contained two distinct formats of measure information: “lumped” measures and detailed measures. The lumped measures appeared similar in format to that which would be allowed for customized measures that do not fall into the measure categories defined for high impact measures; this format includes a simplified cost per kWh or therm of savings along with a typical EUL and NTG for measures in the category. This format of input is not allowed for measures that were identified as high impact measures; high impact measures are defined as those measures which account for several percent or more of total portfolio savings. The detailed measure input appears to be a similar format to the measures submitted in quarterly accomplishment reports for the 2006-2008 EE program cycle. For example, rather a representative entry for residential upstream interior CFL, using the weight averaged lamp wattage, cost and impact, the submission contains twenty-two such measures. The submission contains two hundred twenty-two measures for the “mass market” program; although these measures are each straight forward to review the number makes the review time consuming and the format does not allow for a review in a consistent manner for all IOU submissions nor is a direct comparison of submissions across the IOUs possible.

The submission provides the “target market”, government partnerships, and third party partnerships data as lumped measures as described above. These three categories account for 24%, 6% and 16% respectively, or 46% collectively of the total PG&E portfolio estimated kWh savings; they also account for approximately 36% of both the kW and therms estimated portfolio savings. In their current form these estimated savings are not reviewable. As described below in the customized measure section, these categories should be divided into measure groups as previously discussed. Using a combination of historical data and planning estimates, the contributions of these three program categories should be estimated for the common IOU measure groups.

Attachment 3- Issues with Pacific Gas and Electric 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

Customized Measures

As noted above, almost half of the portfolio estimated kWh, and thirty-six percent of portfolio estimated kW and therm savings are attributed to “lumped” or “customized” measures. No information is provided on the predominate measure type for these impacts other than the general categories such as “Residential - HVAC”, “Non-residential HVAC”, “Residential - Lighting”, “Non-Residential - Lighting”, “Non-Residential - Process” for these measures. As submitted these category of measures are not reviewable. Further information is required for review to be completed.

Due to the size of these lumped or customized measure categories, in terms of percentage of portfolio savings, additional information is required. These categories should be further subdivided into more specific measure groups to allow review. For example: HVAC equipment should be subdivided into the major expected measure groups such as chillers, packaged a/c, fans and pumps, or other appropriate measures; measures such as “TM H&H-NRR-Natural Gas” should be subdivided into appropriate understandable measure groups; Lighting should be subdivided into interior or exterior, linear fluorescent, CFLs, or other appropriate measure group; process should be subdivided into pump off controllers, or other appropriate measure groups; measures described as “A/C & Refrigeration” should be separated into the correct a/c and refrigeration sub-categories.

It is realized that a true customized measure category represents measures for which savings calculations are made for each project based upon the specific measure or measures to be installed and the customers’ specific site location and operation parameters. However, it is also known that most all these measures are custom calculated using software such as the SPC program software or the SBD (NR-NC) software and that those software programs provide detailed measure-by-measure savings estimates. A combination of program participation history information combined with projection of future participation should be utilized to provide customized measure parameters in a manner similar to that used for deemed measures; typical measure NTG, EUL, costs, incentives, kWh, kW and therm parameters must be provided to allow review of these assumptions. It is expected that a fraction of the customized process measure will not be able to be categorized in this manner due to a large number of smaller projects that are expected; however, it is expected that a majority of the process measures can also be categorized into a small number of more specific categories. For example, oil well pump off controllers are a major contributor to the 06-08 savings claims in the process category; those types of known measures should be individually reported as categories.

Measure Cost and Incentives Dollar Amounts

Many values for gross measure cost, incentives and participant costs appear inconsistent. In many cases this inconsistency results in a negative participant cost that, as per D.06-06-063, is expected only rarely. However, this occurs in 76 out of approximately 315 measures entries.

For example, for the direct install (or mid-stream) residential a/c unit refrigerant charge and flow service measure, the gross measure cost is input as \$42.35 while the RCA contractor

Attachment 3- Issues with Pacific Gas and Electric 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

incentive is listed as \$150 resulting in a negative participant cost of \$107.65; it is expected that the gross measure cost for this item should be equal to the contractor payment such that the participant cost is zero. Additionally, if the contractor charges the participating customer for any aspect of the service it would be expected that the participant cost would actually be greater than zero and equal to the charge to the customer.

Another example the residential 90+ AFUE gas furnace measures that have a gross measure costs of under \$10 specified along with a \$200-300 participant rebate resulting in a negative participant costs of \$200-300. It is expected that this gross measure cost would be at least equal to the rebate such that the participant cost would not be negative.

Similarly, for the residential interior screw-in 23 watt CFL measure, a gross measure cost is entered as \$0.38 with an upstream incentive of \$1.84 resulting in a negative participant cost of \$1.46. In this case it appears that the average participating customer CFL purchase price, after the upstream incentive, is being entered as the gross measure cost when the gross measure cost would be the sum of the customer net purchase price plus upstream incentive. Since the CFL measures in the workbook include over sixty million CFLs, this issue might result in a \$100 million possible issue in final results.

In the case of high impact measures (such as the lumped or customized measures discussed above) that are a composite of upstream, mid-stream, direct install or down-stream programs those measures should be separated into multiple measures to allow review by delivery mechanism. High impact measures in this context would mean those which contribute several percentage points to the portfolio estimated savings total; this would include residential and non-residential CFLs (screw-in and fixtures), non-residential linear fluorescents, residential and non-residential new a/c, and other measures using multiple delivery mechanisms with similar percentage or high portfolio contribution.

Measure Energy Impacts

In many cases the entered energy impacts values are not easily compared to the DEER values for the measure. Additional information will be required to allow a review to confirm that DEER values were used as the basis for savings estimates for measures with DEER values available.

For example, residential screw-in CFLs are expected to use DEER values for kWh and kW using an in-service rate multiplier based on IOU best estimates of leakage outside the service area, customer storage rates, and lamp breakage or other loss such that the total savings estimates reflect DEER savings values for actual installations during the 2009-2011 cycle. The input parameters for kWh and kW appear to be close but not entirely consistent with the DEER kWh and kW value and in-service rate assumptions are not provided so as to allow a review of the input parameters. The entered values for residential 23 watt screw-in CFLs are 37.125 kWh and 0.006075 kW; this kWh value corresponds to a 75% in-service rate using the DEER value for existing residential buildings over the entire PG&E service area. However the kW value expected when applying the same in-service rate would be 0.006069; it is expected that this very

Attachment 3- Issues with Pacific Gas and Electric 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

small variation is simply a round off error, but we would like more information on the exact assumptions used to modify the DEER values so that we can confirm our initial review result that PG&E has endeavored to use DEER energy values in appropriate measures when review is possible.

After PG&E re-submits in the required format we will perform a more complete review of values. When creating the inputs for the composite measure groups as required, PG&E should retain sufficient measure description information to inform the next review. For measures that represent a mix of efficiencies or sizes, such as lamp wattages, the average value should be provided along with other major assumptions used to turn the DEER values into the entered value. For measures that represent a mix of primary measure types, such as different fluorescent lighting system types, the primary measure type (such as T12 to T8 fixture replacement or T12 to T8 lamp and ballast replacement) should be supplied to allow more direct comparison to DEER values.

Load Shapes and TOU Adjuster

Some selections for measure load shapes do not appear to be the most appropriate. For example, the residential high efficiency clothes washer category has the "DEER:HVAC_Duct_Sealing" load shape selected, for the government partnerships non-residential process category the "DEER:HVAC_Split-Package_AC" was selected while for the same measures category in the third party programs the "DEER:HVAC_Duct_Sealing" load shape was selected while for that measure in the targeted market programs the "DEER:HVAC_Refrig_Charge" load shape was selected (all these seem inappropriate), for the non-residential mass market refrigeration measures the "DEER:HVAC_Duct_Sealing" load shape was selected. These selections require further explanation and/or update.

The "TOU adjusters" adopted in D.06-06-063 apply only to small packaged HVAC a/c equipment replacements for which TOU load shapes (not the DEER load shapes) are selected. However, all cases for which TOU adjusters were entered (and always with a value of 100%) are for measures which utilize DEER hourly rather than IOU TOU load shapes. These TOU adjuster percentages are expected to be zero rather than 100%.

EULs and NTGs

Although no values used for EULs or NTGs appear to be outside the ranges within DEER many values are not equal to DEER values probably due to the measure groups using weight averaged EULs and NTGs. For measures which are in the high impact groups (as defined above) added information about the assumed composition of the group is required to allow review. For example, in the case of large number of "lighting" lumped or customized measure categories, until the fraction of screw-in CFLs (including upstream, down-stream, direct install, and specialty versus standard lamp types) and linear fluorescents are separated out as independent measures we will be unable to determine if correct NTGs and EULs have been assigned. For this reason the full review of these parameters will be deferred until a new submission is received.

Attachment 3- Issues with Pacific Gas and Electric 2009-2011 EE Application Measure Detail and Cost Effectiveness Submission

Early Retirement versus Replace-On-Burnout Measures

It appears that many retrofit measures utilize full energy impacts (the difference between pre-existing equipment consumption or demand compared to post-retrofit equipment consumption or demand) rather than incremental impacts (using the minimum code compliant replacement equipment rather than the pre-existing equipment consumption and demand as the baseline.) This full savings assumption normally means that the IOU program activity is causing an early retirement/replacement (ER) of existing equipment. Incremental savings assumptions are used for replace-on-burnout (ROB) retrofits; those retrofits planned by the participant independent of the program. In the case of early retirement the CPUC policy allows the full savings to be claimed only for the remaining life (RUL) of the pre-existing equipment rather than the expected life (EUL) of the new equipment. The adopted DEER RUL is defined as one-third of the EUL. Past the RUL year the only savings claim allowed is the ROB incremental savings above the standard equipment requirement or practice; if the retrofit equipment is the same performance as the code minimum or standard equipment then the incremental savings is zero past the RUL year. Additionally, for early retirement the full cost of the equipment installation is used minus that full cost of the standard equipment (may be the same item and cost) discounted, from an assumed installation RUL years later, back to the current retrofit installation date.

It appears that many retrofit measures in the submission are mixing EUL and costs for ROB assumptions with energy impacts for ER assumption. This seems the case for all florescent lighting system measures and perhaps many HVAC a/c and process measures. Further information on the ER versus ROB assumptions for lighting, HVAC and process measures is required for review or the EUL/RUL, costs and savings values should be adjusted to properly represent ER or ROB assumptions.

Natural Gas Impacts

All lighting measures as well as many HVAC (both equipment and envelope) measures have natural gas as well as electric impacts. Most lighting measures have a negative (added consumption) natural gas impact while many HVAC measures can have a positive (reduced consumption) natural gas impact. It is required that both electric and natural gas impacts and the resultant ratepayer avoided cost be included in the inputs and TRC/PAC calculations.

Other Updates

PG&E staff informed Energy Division staff by telephone that the utility discovered that the administrative and incentive budget allocation for the PG&E's Government Partnerships programs needs to be updated. The utility will make those updates in the 2009-2011 application supplement filing.

(END OF ATTACHMENT 3)

Attachment 4- Issues with Southern California Gas (SCG) and San Diego Gas and Electric (SDG&E) 2009-2011 EE

Application Measure Detail and Cost Effectiveness Submission

Source of data reviewed – 09-11 E3 Planning Calculator Export file
“Base_Scenario_SoCalGas_Portfolio.xls” and “Base_Scenario_SDGE_Portfolio.xls”

Format and Content of Submission

The submission was not provided in compliance with the required (and extensively discussed and agreed upon) format; specifically, measure groupings were to be defined in a consistent manner across all IOUs with the submitted E3 Calculators using those commonly defined measure groups and naming conventions. Not all IOUs would use all common measure groups; the content of each IOU submission was to be based on those measures included in each IOU portfolio. SCG and SDG&E re-submissions are required. In addition to re-submitting in the required format, the SCG and SDG&E re-submissions should be guided by the additional comments in the sections below.

Customized Measures

For SCG approximately half of the portfolio estimated lifetime savings and forty percent of annual savings are attributed to four non-residential measures (CPI Heat Recovery, PER Misc. Process Equip. and Replacement Equip., CPI Equipment Modernization, and Burners and burner related equipment). The NTG, EUL, savings and cost parameters for these measures are provided per therm of annual estimated impacts. These are non-DEER measures targeted at the miscellaneous commercial sector. As submitted this category of measures are not reviewable. Due to the significance of these measures to the SCG portfolio, more information on these measures is required. For example, the Heat Recovery measure can be subdivided into boiler heat recovery, industrial process heat recovery, refrigeration heat recovery, or other appropriate categories. Other measures require a better definition so that these can be evaluated.

For SDG&E about 20% of kWh and Kw annual savings and about 45% of gas annual savings are attributed to customized measures classified as whole building, bid strategy or SPC strategy. The NTG, EUL, kW and cost parameters for these measures are provided per kWh of annual estimated impacts. No information is provided on the predominant measure type for these impacts. As submitted this category of measures are not reviewable. Due to the significance of these measures to the SDG&E portfolio, more information on these measures is required. For example: HVAC equipment should be subdivided into the major expected measure groups such as chillers, packaged a/c, fans and pumps, or other appropriate measures; measures such as “Whole Bldg - Th”, “Other - SPC Strategy”, and “Other Gas - Bid Strategy” should be subdivided into appropriate understandable measure groups; Lighting should be subdivided into interior or exterior, linear fluorescent, CFLs, or other appropriate measure group; process should be subdivided into appropriate measure groups; measures described as “Refrigeration - Bid Strategy” should be separated into the correct refrigeration sub-categories.

Attachment 4- Issues with Southern California Gas (SCG) and San Diego Gas and Electric (SDG&E) 2009-2011 EE

We do realize that savings for these measures might be customer-specific, i.e. impacts would be location- and operation-specific. However, it is also known that the impacts for these measures could have been estimated using a typical case or by aggregating the impacts of constituent measures. A combination of historic program participation data in conjunction with estimated future participation should be used to provide measure parameters in a manner similar to that used for deemed measures; typical measure NTG, EUL, costs, incentives, kWh and therms should be provided for the measures which these categories represent to allow a review of these assumptions.

Measure Cost and Incentives Dollar Amounts

Many values for gross measure cost, incentives and participant costs appear inconsistent. In many cases this inconsistency results in a negative participant cost that, as per D.06-06-063, is expected only rarely. However, this occurs in 14 out of 46 measures.

In SCG's filing, for example, for the Low Flow Showerhead measure, the gross measure cost is input as \$14.32 while the direct install labor and material are input as \$16.74 and \$14.32, respectively which results in a negative participant cost of \$16.74; it is expected that the gross measure cost for this item should be the sum of the material and direct install costs such that the participant cost is zero. Another SCG filing example is the DWH Controller that has a gross measure cost of \$0.61 specified along with an end-user rebate of \$86, resulting in a negative participant cost of \$85.39. It is expected that this gross measure cost would be at least equal to the \$86 incentive such that the participant cost would not be negative. Similarly, for the SCG Burners and burner related equipment, a major contributor to the portfolio savings, the gross measure cost is entered as \$0.79 per therm of savings with an incentive of \$1 per therm saved, resulting in a negative participant cost of \$0.22. It is not clear what assumptions have been made and where the error could be.

In SDG&E's filing, for example, For example, for Pool Pump Motors, the gross measure cost is input as \$182.18 while the customer incentive is input as \$300 (no installation cost), resulting in a negative participant cost of \$117.82; it is expected that the gross measure cost for this item should be the sum of the customer rebate and the contractor payment (when applicable) such that the participant cost is zero. For refrigerator and freezer recycling, the gross measure cost is input as \$97.75 and the direct install recycling contractor payment is input as \$100 resulting in a negative participant cost of \$2.25. Additionally, if the recycled refrigerator/freezer has a residual value, it would be expected that the participant cost would actually be greater than zero and equal to the residual value of the appliance minus the customer rebate. For the interior LED New Technology measure, the gross measure cost of \$15 is specified along with a \$150 rebate, resulting in a negative participant cost of \$135. It is expected that this gross measure cost would be at least equal to the \$150 rebate such that the participant cost would not be negative. Similarly, for the residential interior screw-in CFL measure, a gross measure cost is entered as \$0.43 with incentives totaling \$2.32 resulting in a negative participant cost of \$1.89. In this case it appears that the average participating customer CFL purchase price, after an upstream or other

Attachment 4- Issues with Southern California Gas (SCG) and San Diego Gas and Electric (SDG&E) 2009-2011 EE

rebate, is being entered as the gross measure cost when the gross measure cost would be the sum of the customer net purchase price plus upstream, mid-stream or POS rebates.

Measure Energy Impacts

In many cases the entered energy impacts values are not easily compared to the DEER values for the measure. Additional information will be required to allow a review to confirm that DEER values were used as the basis for savings estimates for measures with DEER values available.

In the SCG filing, for example, Energy Star Clothes Washer (MEF=1.8) is expected to use DEER values. However the input parameters do not appear to be consistent with the DEER savings and costs. The gross measure cost is entered as \$285 versus \$276 used in the DEER estimate; these are close, but the difference should be explained. A rebate of \$60 suggests that the measure is being offered on a burnout basis with incentive designed to partially offset the incremental cost difference. The measure saving estimate is 25 therms per unit which seems to quite different from the DEER estimates provided in KBTU/unit of 823 (8.3 therms). For measures that represent a mix of efficiencies or sizes, the average value should be provided along with other major assumptions used to turn the DEER value into the entered value. When a measure does have an exact DEER-equivalent, closest DEER measure available should be indicated to allow a comparison.

In the SDG&E filing, for example, residential screw-in CFLs are expected to use DEER values for kWh and kW using an in-service rate multiplier based on IOU best estimates of leakage outside the service area, customer storage rates, and lamp breakage or other loss such that the total savings estimates reflect DEER savings values for actual installations during the 2009-2011 cycle. However the input parameters for kWh and kW do not appear to be consistent with the DEER kWh and kW value and the average lamp wattage and in-service rate assumptions are not provided so as to allow a review of the input parameters; the ratio of kWh, kW and therm impacts for this measure in the filing does not match DEER values thus no single in-service rate assumption could be assumed to provide the filed values from the DEER values. In the SDG&E filing, the "Residential AC SEER 14" measure has a kWh, kW and therm impacts per ton of 94.6, 0.0038 and -0.0054 respectively; the DEER values for average residential vintages across the SDG&E service area for this measure are 90 kWh/ton, .137 kW/ton and -0.525 therm/ton. Similar differences are noticed for other lighting and HVAC measures. More information is required to understand these differences.

For SDG&E measures that represent a mix of efficiencies or sizes, such as lamp wattages, the average value should be provided along with other major assumptions used to turn the DEER value into the entered value. For measures that represent a mix of primary measure types, such as different fluorescent lighting system types, the primary measure type (such as T12 to T8 fixture replacement or T12 to T8 lamp and ballast replacement) should be supplied to allow more direct comparison to DEER values. This type of added information will be required to further review the submission.

Attachment 4- Issues with Southern California Gas (SCG) and San Diego Gas and Electric (SDG&E) 2009-2011 EE

High impact measures that are a composite of upstream, mid-stream, direct install or down-stream programs those measures should be separated into multiple measures to allow review by delivery mechanism. High impact measures in this context would mean those which contribute several percentage points to the portfolio estimated savings total; this would include residential and non-residential CFLs (screw-in and fixtures), non-residential linear fluorescents, HVAC bid strategy and other measures using multiple delivery mechanisms with similar percentage or high portfolio contribution.

EULs and NTGs

Although no values used for EULs or NTGs appear to be outside the ranges within DEER, many values cannot be compared with DEER values without additional information on measures.

For example, in SCG's filing, a 51.4% NTG is used for several measures with the source for that value not documented. Those values that are a composite of DEER values due to the measure being combined delivery mechanisms or different target customer groups need further explanation.

In SDG&E's filing, for example, the "Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture" measure specifies the EUL as 14.6 years with a NTG of 0.77, The "Premium T8 with T12 34Watt Baseline" and similar measures specify the EUL as 7.5 years. Neither of these values is directly related to a DEER EUL or RUL; perhaps a mixture of replace-on-burnout and early retirement is being assumed which should be split into two separate measures. For the HVAC bid strategy measures, which have been specified with 15 year EUL values, added information about the assumed composition of these measures is required to allow review.

Early Retirement versus Replace-On-Burnout Measures

It appears that some retrofit measures utilize full energy impacts (the difference between pre-existing equipment consumption or demand compared to post-retrofit equipment consumption or demand) rather than incremental impacts (using the minimum code compliant replacement equipment rather than the pre-existing equipment consumption and demand as the baseline.) This full savings assumption normally means that the IOU program activity is causing an early retirement/replacement (ER) of existing equipment. Incremental savings assumptions are used for replace-on-burnout (ROB) retrofits; those retrofits planned by the participant independent of the program. In the case of early retirement the CPUC policy allows the full savings to be claimed only for the remaining life (RUL) of the pre-existing equipment rather than the expected life (EUL) of the new equipment. The adopted DEER RUL is defined as one-third of the EUL. Past the RUL year the only savings claim allowed is the ROB incremental savings above the standard equipment requirement or practice; if the retrofit equipment is the same performance as the code minimum or standard equipment then the incremental savings is zero past the RUL year. Additionally, for early retirement the full cost of the equipment installation is used minus that full cost of the standard equipment (may be the same item and cost)

Attachment 4- Issues with Southern California Gas (SCG) and San Diego Gas and Electric (SDG&E) 2009-2011 EE

discounted, from an assumed installation RUL years later, back to the current retrofit installation date.

The filings do not clearly identify which assumption, or if a combination of assumptions, has been used for some measures. This should be indicated in the appropriate column of the calculator.

Electric Measure Gas Impacts and Gas Measure Electric Impacts

We commend SCG for including both gas and electric impacts in the spreadsheets. It is unclear, however, if electric impacts are being inappropriately included. For example, the electric impact for whole building gas measures requires explanation; are these impacts due to gas measures and if so which gas measures and are those savings expected not to be claimed by SCE?

For many measure SDG&E has included gas impacts for electric measures, however, those impacts were not included for many non-residential building lighting measures. DEER values for gas impacts related to non-residential building lighting measures should be included in a re-submitted set of calculators.

(END OF ATTACHMENT 4)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 5

SCENARIO 2 - BASE CASE

Table 1.1 - Projected GROSS Annual Savings Impacts by Year ^{1,2,3}

	2009			2010			2011			3 YR TOTAL
	Total	CPUC Goal	% of 2009 Goal	Total	CPUC Goal	% of 2010 Goal	Total	CPUC Goal	% of 2011 Goal	
Energy Savings (Gross GWh)	1,109	1,067	104%	1,235	1,015	122%	1,351	1,086	124%	3,695.44
Demand Reduction (Gross MW)	213	232	92%	237	220	108%	259	236	110%	709.35
Gas Savings (Gross MMTh)	21	20.3	106%	24	21.1	114%	26	22.0	120%	71.85

¹ PG&E is forecasting annual savings installations during 2009 - 2011 program funding cycle.

² This table compares forecast accomplishments in that program year against CPUC's annual goal and does not incorporate any prior year reductions.

³ Indicate and include Codes & Standards and LIEE Savings.

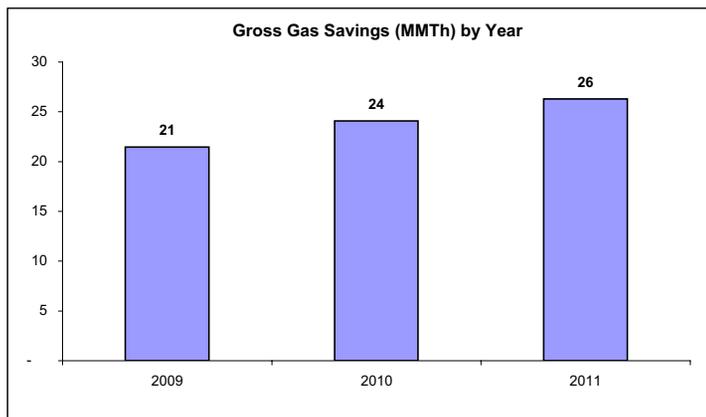
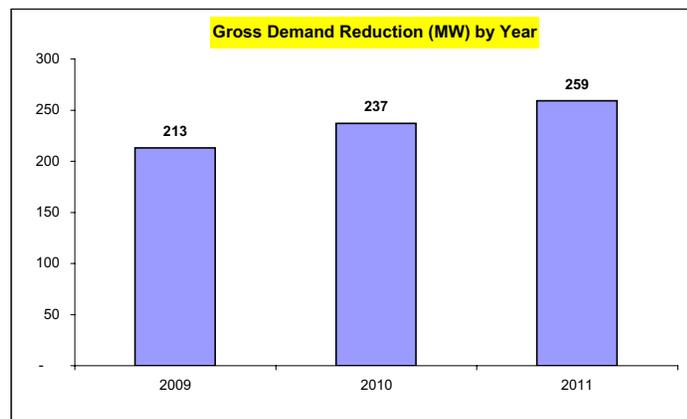
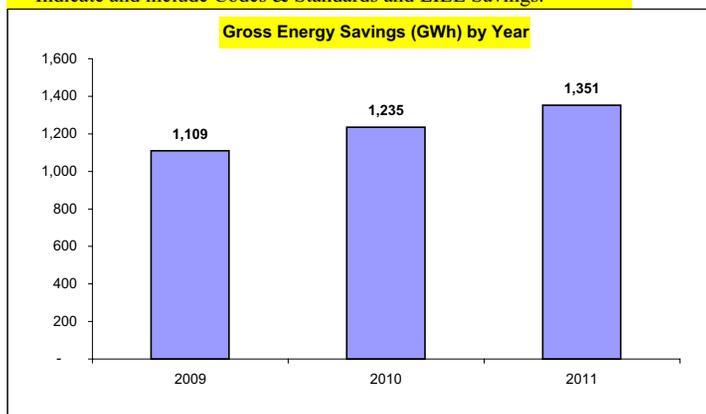


Table 1.1 - Annual Savings

SCENARIO 2 - BASE CASE

Table 1.2 - 2009-2011 Total Projected Gross Portfolio Savings Impacts

Total Portfolio	Budget (millions) ¹		Energy Savings (Gross GWh)		Demand Reduction (Gross MW)		Gas Savings (Gross MMTh)	
	Total	% of Total	Total	% of Total	Total	% of Total	Total	% of Total
Residential	223,430,187	36%	1,324.87	36%	282.69	40%	4.52	6%
Appliances	12,035,464	5%	35.60	3%	18.38	7%	1.79	40%
Consumer Electronics	-	0%	-	0%	-	0%	-	0%
Cooking Appliances	-	0%	-	0%	-	0%	-	0%
HVAC	57,837,713	26%	54.75	4%	78.97	28%	2.12	47%
Lighting	146,158,501	65%	1,173.62	89%	171.07	61%	(0.22)	-5%
Pool Pump	352,587	0%	3.24	0%	1.13	0%	-	0%
Refrigeration	4,959,400	2%	57.67	4%	13.14	5%	(0.01)	0%
Water Heating	2,086,522	1%	-	0%	-	0%	0.84	19%
Other	-	0%	-	0%	-	0%	-	0%
Nonresidential ³	226,619,988	36%	1,189.59	32%	226.77	32%	42.44	59%
HVAC	75,860,210	33%	323.58	27%	63.60	28%	0.00	0%
Lighting	34,482,319	15%	473.96	40%	97.19	43%	(0.05)	0%
Office	-	0%	-	0%	-	0%	-	0%
Process	105,384,202	47%	332.64	28%	49.10	22%	42.04	99%
Refrigeration	2,262,636	1%	24.15	2%	3.42	2%	-	0%
Other	8,630,621	4%	35.26	3%	13.44	6%	0.44	1%
Cross Cutting ²	175,239,755	28%	762.96	21%	123.30	17%	14.24	20%
Low Income Energy Efficiency	-	0%	121.87	3%	24.38	3%	5.24	7%
Appliances								
Consumer Electronics								
Cooking Appliances								
HVAC								
Lighting								
Pool Pump								
Refrigeration								
Water Heating								
Other								
Codes & Standards	-	0%	296.15	8%	52.21	7%	5.41	8%
Total	625,289,930		3,695.44		709.35		71.85	
CPUC Goal			3,168.00		688.00		63.40	

1 - The total budget by market sector is sum of rebate incentive, payments to upstream vendors, direct install material and labor costs. Excludes marketing and administrative related costs.

Cross cutting core programs allocated to appropriate market sector where energy savings expected to be realized.

2 - Cross Cutting programs include Government Partnership programs and Third Party programs.

3- All reporting of low income follow the same residential headings except HVAC. HVAC includes Heating Systems, Cooling Measures, Infiltration, Weatherization and Space Conditioning,

and Other includes low income New Measures and Pilots.

SCENARIO 2 - BASE CASE

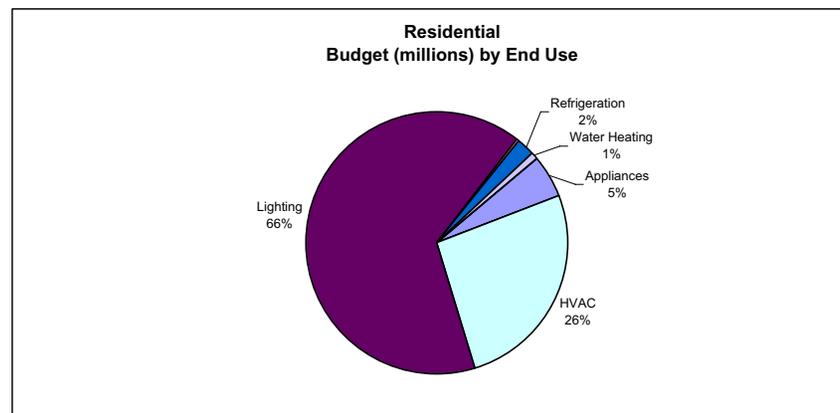
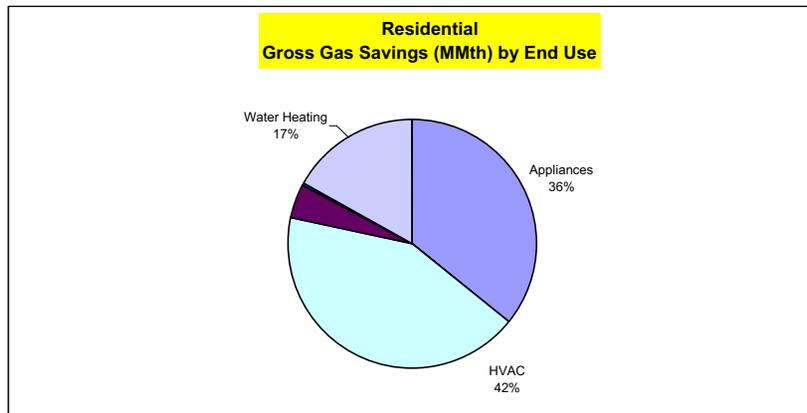
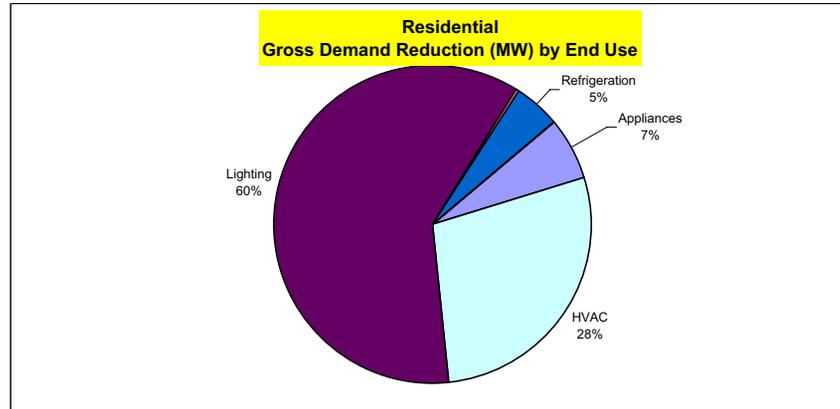
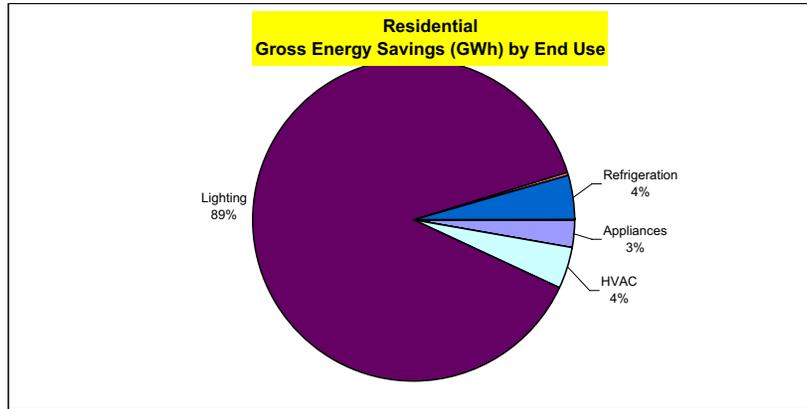


Table 1.2 - Savings by End Use

SCENARIO 2 - BASE CASE

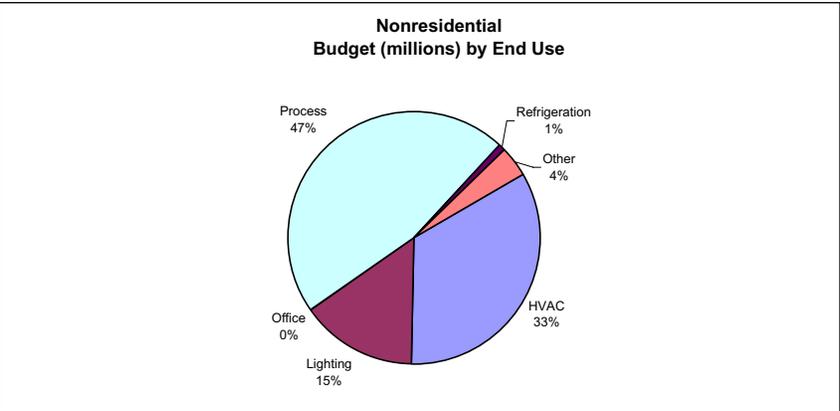
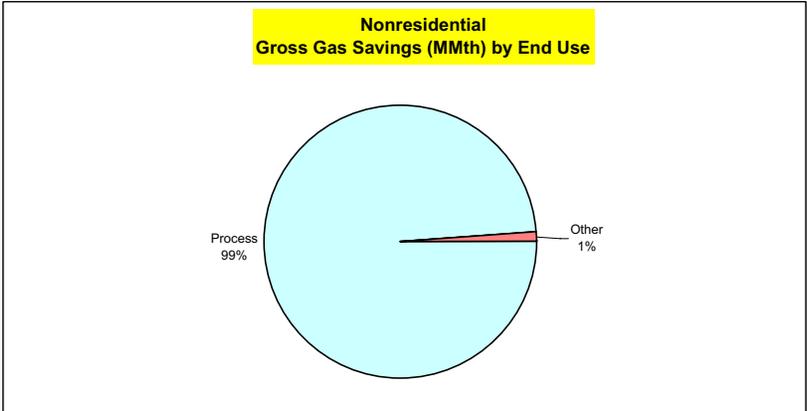
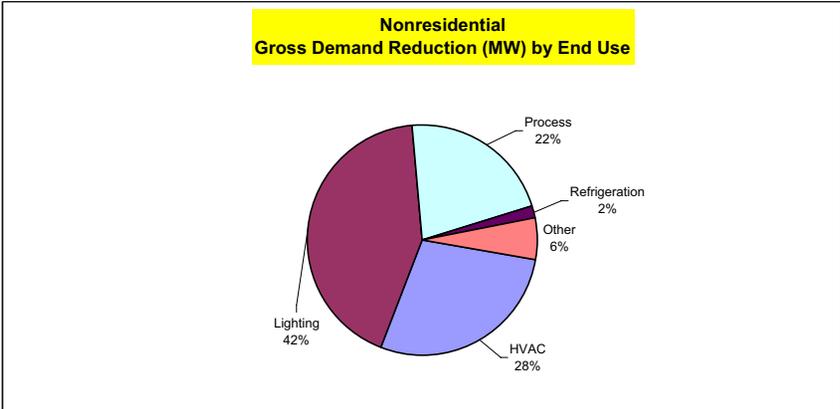
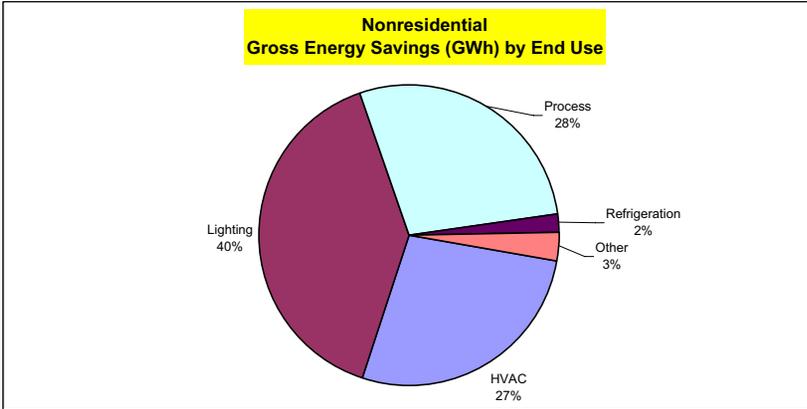


Table 1.2 - Savings by End Use

SCENARIO 2 - BASE CASE

Table 1.3 - 2009-2011 Projected Savings Impacts of Resource Programs by Market Sector

Market Sector	Budget (millions) ¹	% of Total	Energy Savings (Gross GWh)	% of Total	Demand Reduction (Gross MW)	% of Total	Gas Savings (Gross MMTh)	% of Total
Residential	223,430,187	36%	1,324.87	36%	282.69	40%	4.52	6%
Commercial	127,440,449	20%	822.60	22%	167.70	24%	12.58	18%
Industrial	70,979,973	11%	263.31	7%	38.16	5%	22.64	32%
Agricultural	28,199,567	5%	103.69	3%	20.91	3%	7.22	10%
Cross Cutting ²	175,239,755	28%	762.96	21%	123.30	17%	14.24	20%
Low Income Energy Efficiency	-	0%	121.87	3%	24.38	3%	5.24	7%
Codes & Standards	-	0%	296.15	8%	52.21	7%	5.41	8%
Total ³	625,289,930		3,695.44		709.35		71.85	
CPUC Goal			3,168.00		688.00		63.40	

1 - The total budget by market sector is sum of rebate incentive, payments to upstream vendors, direct install material and labor costs. Excludes marketing and administrative related costs.

2 - Cross cutting core programs allocated to appropriate market sector where energy savings expected to be realized.

3 - Cross Cutting programs include Government Partnership programs and Third Party programs.

3 - Projected savings impacts include Intergrated Audit Program.

SCENARIO 2 - BASE CASE

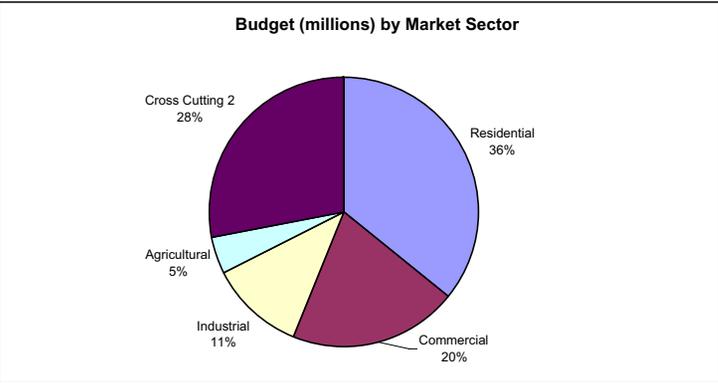
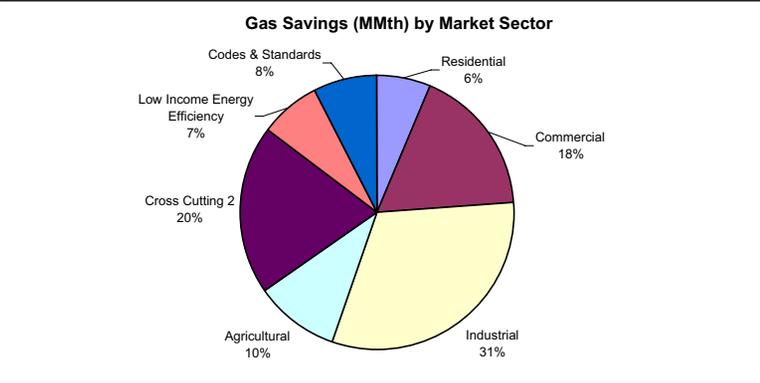
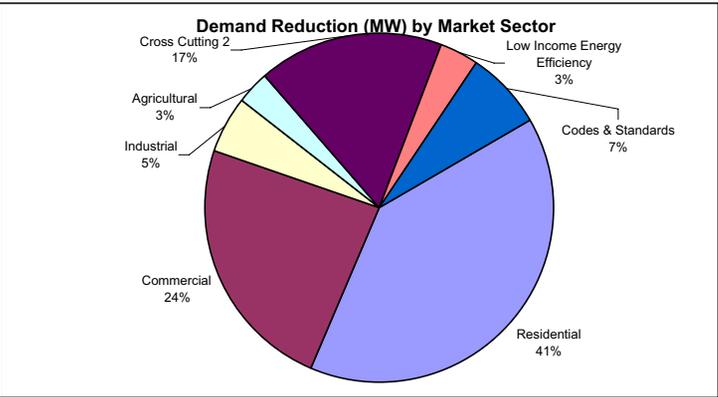
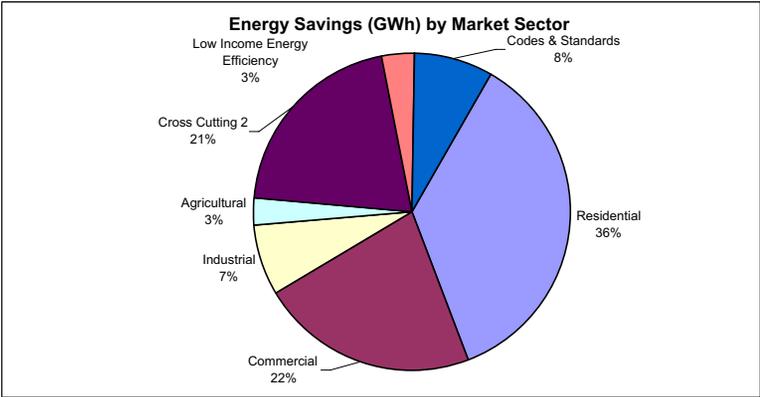


Table 1.3 - Savings by Market Sector

SCENARIO 2 - BASE CASE

Table 1.4 - Portfolio Measure Grouping Gross and NET													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg NTG Ratio	Weighted Avg EUL
RESIDENTIAL													
RESIDENTIAL		Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		
DEEMED MEASURES		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Appliances	UNIT	208,190		18,382	#DIV/0!	35,596,460		#DIV/0!	1,793,340	#DIV/0!	83%	11.00	
Laundry & Kitchen	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Refrigerators													
Appliances Recycling	UNIT	141,697		13,136	#DIV/0!	57,671,019		#DIV/0!	(10,651)	#DIV/0!	66%	4.50	
Refrigerators/Freezers	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Room A/C	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Other	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Residential Audits	UNIT	Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
Consumer Electronics	UNIT	Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
Entertainment													
Home Office													
Other													
Water Heating		Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
Efficiency	UNIT	13,185		-	#DIV/0!	-		#DIV/0!	78,376	#DIV/0!	58%	11.00	
Use Reduction	UNIT	89,568		-	#DIV/0!	-		#DIV/0!	763,319	#DIV/0!	73%	11.00	
Pool Pump	UNIT	Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
Residential Other	UNIT	Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
HVAC		Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
New Room AC	UNIT	12,118		1,292	#DIV/0!	837,037		#DIV/0!	-	#DIV/0!	90%	9.67	
New Package, Split System AC, etc.	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Repair & Maintenance	UNIT	120,961		61,134	#DIV/0!	43,444,433		#DIV/0!	-	#DIV/0!	78%	10.00	
HVAC Ducts	UNIT	77,579		6,087	#DIV/0!	4,556,515		#DIV/0!	822,956	#DIV/0!	78%	18.00	
HVAC Envelope	UNIT	37,697,157		4,352	#DIV/0!	2,084,207		#DIV/0!	1,262,473	#DIV/0!	70%	20.00	
HVAC Install - Operation	UNIT	27,594		-	#DIV/0!	-		#DIV/0!	30,198	#DIV/0!	66%	17.75	
HVAC Controls	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
New Evap Coolers & Whole House Fans	UNIT	13,131		6,104	#DIV/0!	3,824,621		#DIV/0!	(107)	#DIV/0!	75%	16.67	
Lighting		Subtotal		Subtotal	Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	
Screw-in CFL Interior (Downstream)	UNIT	56,878,968		159,609	#DIV/0!	975,145,574		#DIV/0!	(219,953)	#DIV/0!	60%	6.30	
Screw-in CFL Interior (Upstream - Traditional)	UNIT	1,003,616		9,227	#DIV/0!	70,344,604		#DIV/0!	(3,711)	#DIV/0!	72%	17.00	
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Screw-in CFL Interior (Direct Install)	UNIT	1,205,327		-	#DIV/0!	30,045,472		#DIV/0!	-	#DIV/0!	85%	16.00	
Screw-in CFL Interior (Midstream)	UNIT	6,769		126	#DIV/0!	899,262		#DIV/0!	(170)	#DIV/0!	76%	16.00	
Screw-in CFL Interior (Giveaway)	UNIT	89,179		1,639	#DIV/0!	13,276,955		#DIV/0!	-	#DIV/0!	76%	15.00	
CFL Fixture Interior (Midstream)	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
CFL Fixture Interior (Upstream)	UNIT	528,070		474	#DIV/0!	83,906,781		#DIV/0!	(617)	#DIV/0!	73%	13.83	
CFL Fixture Interior (Direct Install)													
CFL Fixture Interior (Giveaway)	UNIT	3		7,039	#DIV/0!	10,474,448		#DIV/0!	993,931	#DIV/0!	70%	17.00	
CFL Exterior	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	48%	19.00	
CFL Fixture Exterior (Midstream)	UNIT	2		3,754	#DIV/0!	36,835,622		#DIV/0!	42,566	#DIV/0!	70%	11.00	
CFL Fixture Exterior (Upstream)	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
CFL Fixture Exterior (Direct Install)	UNIT	2		1,791	#DIV/0!	2,024,185		#DIV/0!	13,717	#DIV/0!	70%	11.50	
LED Interior	UNIT	1		193	#DIV/0!	668,289		#DIV/0!	12,046	#DIV/0!	58%	9.00	
Interior Controls	UNIT	1		13	#DIV/0!	40,685		#DIV/0!	6,973	#DIV/0!	70%	14.00	
Interior Exit Signs													
Linear Fluorescents Interior													
Linear Fluorescents (parking structures) Exterior													
Other Interior Lighting													
Other Exterior Lighting	UNIT	1,338		665	#DIV/0!	5,031,055		#DIV/0!	151,244	#DIV/0!	58%	10.18	

Table 1.4 - Portfolio Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.4 - Portfolio Measure Grouping Gross and NET													
Measure Summary Categories	Unit		Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg NTG Ratio	Weighted Avg EUL
	Description (1*)	Unit Goals											
Refrigeration		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal			
CUSTOMIZED MEASURES	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	Subtotal	Subtotal		0%	-
HVAC Equipment	UNIT	7,324,120		-	#DIV/0!		-	#DIV/0!	246,041	#DIV/0!		50%	5.00
HVAC Envelope	UNIT	3,331		547	#DIV/0!		1,156,783	#DIV/0!	-	#DIV/0!		50%	20.00
Interior Lighting													
Exterior Lighting	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Whole Building	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Other													
	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
NONRESIDENTIAL	UNIT	Sum - NonRes		10,248	#DIV/0!		33,615,252	#DIV/0!	-	#DIV/0!		61%	8.60
DEEMED MEASURES	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Nonresidential Audits	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Food Service	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Laundry General		Subtotal											
Agricultural		Subtotal											
Greenhouse	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Municipal Water	UNIT	Subtotal		23,669	#DIV/0!		66,210,822	#DIV/0!	(2,248)	#DIV/0!		68%	15.00
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Refrigeration	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Casework	UNIT	26,861		2,317	#DIV/0!		2,256,345	#DIV/0!	-	#DIV/0!		50%	10.00
Compressors	UNIT	29,450		2,647	#DIV/0!		12,518,119	#DIV/0!	-	#DIV/0!		50%	15.00
Condenser	UNIT	5,479		2,367	#DIV/0!		2,082,802	#DIV/0!	25	#DIV/0!		50%	18.00
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Dist to others	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Nonresidential Other (Downstream)	UNIT	Subtotal		943	#DIV/0!		5,742,610	#DIV/0!	-	#DIV/0!		53%	10.00
Nonresidential Other (Upstream)		Subtotal											
Nonresidential Other (Direct Install)	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Nonresidential Other (Pump Test)	UNIT	Subtotal		41,414	#DIV/0!		194,522,672	#DIV/0!	(55,530)	#DIV/0!		60%	2.80
HVAC	UNIT	Subtotal		2,176	#DIV/0!		14,350,868	#DIV/0!	-	#DIV/0!		74%	12.00
Commissioning	UNIT	19,881		374	#DIV/0!		2,675,911	#DIV/0!	(505)	#DIV/0!		77%	16.00
Retrocommissioning	UNIT	690,119		5,248	#DIV/0!		21,334,572	#DIV/0!	(6,850)	#DIV/0!		78%	7.00
New AC Equipment: packaged, split, etc. (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
New AC Equipment: packaged, split, etc. (Upstream)	UNIT	120,588		-	#DIV/0!		6,956,728	#DIV/0!	-	#DIV/0!		77%	11.40
New AC Equipment: packaged, split, etc. (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Chillers	UNIT	279,848		31,809	#DIV/0!		107,251,486	#DIV/0!	(19,457)	#DIV/0!		81%	9.44
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Cooling Towers	UNIT	32,618		-	#DIV/0!		9,007,369	#DIV/0!	-	#DIV/0!		81%	12.00
RCA (Direct Install)													
RCA (Midstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Fans	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Ducts	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Other Ventilation	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Economizers	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Envelope (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
Envelope (Direct Install)	UNIT	16,781		4,009	#DIV/0!		23,768,354	#DIV/0!	-	#DIV/0!		70%	15.00
HVAC Other (Downstream)													
HVAC Other (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!	-	#DIV/0!		0%	-
HVAC Other (Midstream)	UNIT	690,273		-	#DIV/0!		-	#DIV/0!	5,799,348	#DIV/0!		47%	11.93

Table 1.4 - Portfolio Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.4 - Portfolio Measure Grouping Gross and NET													
Measure Summary Categories	Unit		Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg NTG Ratio	Weighted Avg EUL
	Description (1*)	Unit Goals											
Lighting		Subtotal											
Screw-in CFL Interior (Downstream)	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Screw-in CFL Interior (Upstream - Traditional)	UNIT	45,716,467		28,920	#DIV/0!	129,391,164		#DIV/0!	3,379,177	#DIV/0!	73%	12.50	
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Screw-in CFL Interior (Direct Install)	UNIT	192,972,537		59,526	#DIV/0!	344,530,027		#DIV/0!	18,741	#DIV/0!	62%	13.67	
CFL Fixture Interior	UNIT	-		-	#DIV/0!	-		#DIV/0!	-	#DIV/0!	0%	-	
Interior Exit Signs	UNIT	311,031,365		37,807	#DIV/0!	317,144,305		#DIV/0!	2,380,212	#DIV/0!	65%	14.33	
Linear Fluorescents Interior (Downstream)	UNIT	483,127,480		75,728	#DIV/0!	568,462,203		#DIV/0!	43,608,130	#DIV/0!	70%	17.22	
Linear Fluorescents Interior (Direct Install)	UNIT	5,163,815		943	#DIV/0!	4,647,434		#DIV/0!	-	#DIV/0!	90%	10.00	
HID Interior	UNIT	19,808,870		4,465	#DIV/0!	13,866,209		#DIV/0!	-	#DIV/0!	70%	16.00	
LED Interior	UNIT	5		1,458	#DIV/0!	15,983,233		#DIV/0!	111,521	#DIV/0!	69%	10.00	
Interior Controls (Downstream)													
Interior Controls (Direct Install)	UNIT	154,800,000		52,210	#DIV/0!	296,150,000		#DIV/0!	5,410,000	#DIV/0!	100%	9.00	
Interior Day Lighting													
Other Interior Lighting	UNIT			24,385	#DIV/0!	121,866,861		#DIV/0!	5,241,713	#DIV/0!	100%	Varies By Measure	
CFL Lamp Exterior													
CFL Fixture Exterior										#DIV/0!			
Other Exterior Lighting													
Process		Subtotal											
Compressed Air													
Controls													
VSD													
Oil Well Pump-Off Controllers													
Custom													
Cooling & Motors													
Pumps & Vacuum													
Water Heating		Subtotal											
Efficiency													
Use Reduction													

Table 1.4 - Portfolio Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.4 - Portfolio Measure Grouping Gross and NET													
Measure Summary Categories	Unit		Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg NTG Ratio	Weighted Avg EUL
	Description (1*)	Unit Goals											
CUSTOMIZED MEASURES		Sum Cust.											
HVAC		Subtotal											
Chillers													
Controls & VSDs													
Cool Roofs													
Cooling Towers													
Fans													
HVAC Other													
New AC Equipment: packaged, split, etc.													
Other Ventilation													
RCA													
Retrocommissioning													
Space Conditioning													
Exterior Lighting		Subtotal											
Customized Exterior Lighting													
Exterior Lighting Controls													
Interior Lighting		Subtotal											
Customized Interior Lighting													
Daylighting													
Interior Lighting System Modification													
Interior Lighting System Replacement													
Interior Controls													
LED Interior													
SBD - Light Power Density													
Refrigeration		Subtotal											
Process		Subtotal											
Compressed Air													
Controls													
Cooling & Motors													
Custom													
Oil Well Pump-Off Controllers													
Pumps & Vacuums													
VSD													
Whole Building		Subtotal											
*Consumer Electronics Category Definition: Entertainment: Televisions, Set top boxes, Cable boxes, DVD, VCR, and Video Game Systems. Home Office: Desktop computer, Laptop Computer, Printers, Scanners, other computer peripherals. Other: Consumer Electronics not captured in the Entertainment and Home Office categories.													

Table 1.4 - Portfolio Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.5 - Partnership Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
RESIDENTIAL													
		Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		
DEEMED MEASURES		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Appliances	UNIT	208,190		18,382	#DIV/0!		35,596,460	#DIV/0!		1,793,340	#DIV/0!	83%	11.00
Laundry & Kitchen Refrigerators	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Appliances Recycling	UNIT	141,697		13,136	#DIV/0!		57,671,019	#DIV/0!		(10,651)	#DIV/0!	66%	4.50
Refrigerators/Freezers	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Room A/C	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Residential Audits	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
Consumer Electronics	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
Entertainment													
Home Office													
Other													
Water Heating		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Efficiency	UNIT	13,185		-	#DIV/0!		-	#DIV/0!		78,376	#DIV/0!	58%	11.00
Use Reduction	UNIT	89,568		-	#DIV/0!		-	#DIV/0!		763,319	#DIV/0!	73%	11.00
Pool Pump	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	69%	10.00
Residential Other	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
HVAC		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
New Room AC	UNIT	12,118		1,292	#DIV/0!		837,037	#DIV/0!		-	#DIV/0!	90%	9.67
New Package, Split System AC, etc.	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Repair & Maintenance	UNIT	120,961		61,134	#DIV/0!		43,444,433	#DIV/0!		-	#DIV/0!	78%	10.00
HVAC Ducts	UNIT	77,579		6,087	#DIV/0!		4,556,515	#DIV/0!		822,956	#DIV/0!	78%	18.00
HVAC Envelope	UNIT	37,697,157		4,352	#DIV/0!		2,084,207	#DIV/0!		1,262,473	#DIV/0!	70%	20.00
HVAC Install - Operation	UNIT	27,594		-	#DIV/0!		-	#DIV/0!		30,198	#DIV/0!	66%	17.75
HVAC Controls	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
New Evap Coolers & Whole House Fans	UNIT	13,131		6,104	#DIV/0!		3,824,621	#DIV/0!		(107)	#DIV/0!	75%	16.67
Lighting		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Screw-in CFL Interior (Downstream)	UNIT	56,878,968		159,609	#DIV/0!		975,145,574	#DIV/0!		(219,953)	#DIV/0!	60%	6.30
Screw-in CFL Interior (Upstream - Traditional)	UNIT	1,003,616		9,227	#DIV/0!		70,344,604	#DIV/0!		(3,711)	#DIV/0!	72%	17.00
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Screw-in CFL Interior (Direct Install)	UNIT	1,205,327		-	#DIV/0!		30,045,472	#DIV/0!		-	#DIV/0!	85%	16.00
Screw-in CFL Interior (Midstream)	UNIT	6,769		126	#DIV/0!		899,262	#DIV/0!		(170)	#DIV/0!	76%	16.00
Screw-in CFL Interior (Giveaway)	UNIT	89,179		1,639	#DIV/0!		13,276,955	#DIV/0!		-	#DIV/0!	76%	15.00
CFL Fixture Interior (Midstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
CFL Fixture Interior (Upstream)	UNIT	528,070		474	#DIV/0!		83,906,781	#DIV/0!		(617)	#DIV/0!	73%	13.83
CFL Fixture Interior (Direct Install)													
CFL Fixture Interior (Giveaway)	UNIT	3		7,039	#DIV/0!		10,474,448	#DIV/0!		993,931	#DIV/0!	70%	17.00
CFL Exterior	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	48%	19.00
CFL Fixture Exterior (Midstream)	UNIT	2		3,754	#DIV/0!		36,835,622	#DIV/0!		42,566	#DIV/0!	70%	11.00
CFL Fixture Exterior (Upstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
CFL Fixture Exterior (Direct Install)	UNIT	2		1,791	#DIV/0!		2,024,185	#DIV/0!		13,717	#DIV/0!	70%	11.50
LED Interior	UNIT	1		193	#DIV/0!		668,289	#DIV/0!		12,046	#DIV/0!	58%	9.00
Interior Controls	UNIT	1		13	#DIV/0!		40,685	#DIV/0!		6,973	#DIV/0!	70%	14.00
Interior Exit Signs		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Linear Fluorescents Interior		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Linear Fluorescents (parking structures) Exterior		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Interior Lighting		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Exterior Lighting	UNIT	1,338		665	#DIV/0!		5,031,055	#DIV/0!		151,244	#DIV/0!	58%	10.18

Table 1.5 - Partnership Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.5 - Partnership Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg NTG Ratio	Weighted Avg EUL
Refrigeration		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
CUSTOMIZED MEASURES	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
HVAC Equipment	UNIT	7,324,120		-	#DIV/0!		-	#DIV/0!		246,041	#DIV/0!	50%	5.00
HVAC Envelope	UNIT	3,331		547	#DIV/0!		1,156,783	#DIV/0!		-	#DIV/0!	50%	20.00
Interior Lighting													
Exterior Lighting	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Whole Building	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other													
	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
NONRESIDENTIAL	UNIT	Sum - NonRes		10,248	#DIV/0!		33,615,252	#DIV/0!		-	#DIV/0!	61%	8.60
DEEMED MEASURES	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Audits	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Food Service	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Laundry General		Subtotal											
Agricultural		Subtotal											
Greenhouse	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Municipal Water	UNIT	Subtotal		23,669	#DIV/0!		66,210,822	#DIV/0!		(2,248)	#DIV/0!	68%	15.00
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Refrigeration	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Casework	UNIT	26,861		2,317	#DIV/0!		2,256,345	#DIV/0!		-	#DIV/0!	50%	10.00
Compressors	UNIT	29,450		2,647	#DIV/0!		12,518,119	#DIV/0!		-	#DIV/0!	50%	15.00
Condenser	UNIT	5,479		2,367	#DIV/0!		2,082,802	#DIV/0!		25	#DIV/0!	50%	18.00
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Dist to others	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Other (Downstream)	UNIT	Subtotal		943	#DIV/0!		5,742,610	#DIV/0!		-	#DIV/0!	53%	10.00
Nonresidential Other (Upstream)		Subtotal											
Nonresidential Other (Direct Install)	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Other (Pump Test)	UNIT	Subtotal		41,414	#DIV/0!		194,522,672	#DIV/0!		(55,530)	#DIV/0!	60%	2.80
HVAC	UNIT	Subtotal		2,176	#DIV/0!		14,350,868	#DIV/0!		-	#DIV/0!	74%	12.00
Commissioning	UNIT	19,881		374	#DIV/0!		2,675,911	#DIV/0!		(505)	#DIV/0!	77%	16.00
Retrocommissioning	UNIT	690,119		5,248	#DIV/0!		21,334,572	#DIV/0!		(6,850)	#DIV/0!	78%	7.00
New AC Equipment: packaged, split, etc. (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
New AC Equipment: packaged, split, etc. (Upstream)	UNIT	120,588		-	#DIV/0!		6,956,728	#DIV/0!		-	#DIV/0!	77%	11.40
New AC Equipment: packaged, split, etc. (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Chillers	UNIT	279,848		31,809	#DIV/0!		107,251,486	#DIV/0!		(19,457)	#DIV/0!	81%	9.44
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Cooling Towers	UNIT	32,618		-	#DIV/0!		9,007,369	#DIV/0!		-	#DIV/0!	81%	12.00
RCA (Direct Install)													
RCA (Midstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Fans	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Ducts	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Ventilation	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Economizers	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Envelope (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Envelope (Direct Install)	UNIT	16,781		4,009	#DIV/0!		23,768,354	#DIV/0!		-	#DIV/0!	70%	15.00
HVAC Other (Downstream)													
HVAC Other (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
HVAC Other (Midstream)	UNIT	690,273		-	#DIV/0!		-	#DIV/0!		5,799,348	#DIV/0!	47%	11.93

Table 1.5 - Partnership Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.5 - Partnership Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
Lighting		Subtotal											
Screw-in CFL Interior (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Screw-in CFL Interior (Upstream - Traditional)	UNIT	45,716,467		28,920	#DIV/0!		129,391,164	#DIV/0!		3,379,177	#DIV/0!	73%	12.50
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Screw-in CFL Interior (Direct Install)	UNIT	192,972,537		59,526	#DIV/0!		344,530,027	#DIV/0!		18,741	#DIV/0!	62%	13.67
CFL Fixture Interior	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Interior Exit Signs	UNIT	311,031,365		37,807	#DIV/0!		317,144,305	#DIV/0!		2,380,212	#DIV/0!	65%	14.33
Linear Fluorescents Interior (Downstream)	UNIT	483,127,480		75,728	#DIV/0!		568,462,203	#DIV/0!		43,608,130	#DIV/0!	70%	17.22
Linear Fluorescents Interior (Direct Install)	UNIT	5,163,815		943	#DIV/0!		4,647,434	#DIV/0!		-	#DIV/0!	90%	10.00
HID Interior	UNIT	19,808,870		4,465	#DIV/0!		13,866,209	#DIV/0!		-	#DIV/0!	70%	16.00
LED Interior	UNIT	5		1,458	#DIV/0!		15,983,233	#DIV/0!		111,521	#DIV/0!	69%	10.00
Interior Controls (Downstream)													
Interior Controls (Direct Install)	UNIT	154,800,000		52,210	#DIV/0!		296,150,000	#DIV/0!		5,410,000	#DIV/0!	100%	9.00
Interior Day Lighting													
Other Interior Lighting	UNIT			24,385	#DIV/0!		121,866,861	#DIV/0!		5,241,713	#DIV/0!	100%	Varies By Measure
CFL Lamp Exterior													
CFL Fixture Exterior											#DIV/0!		
Other Exterior Lighting													
Process		Subtotal											
Compressed Air													
Controls													
VSD													
Oil Well Pump-Off Controllers													
Custom													
Cooling & Motors													
Pumps & Vacuum													
Water Heating		Subtotal											
Efficiency													
Use Reduction													
CUSTOMIZED MEASURES		Sum Cust.											
HVAC		Subtotal											
Chillers													
Controls & VSDs													
Cool Roofs													
Cooling Towers													
Fans													
HVAC Other													
New AC Equipment: packaged, split, etc.													
Other Ventilation													
RCA													
Retrocommissioning													
Space Conditioning													

Table 1.5 - Partnership Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.5 - Partnership Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit		Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
	Description (1*)	Unit Goals											
Exterior Lighting		Subtotal											
Customized Exterior Lighting													
Exterior Lighting Controls													
Interior Lighting		Subtotal											
Customized Interior Lighting													
Daylighting													
Interior Lighting System Modification													
Interior Lighting System Replacement													
Interior Controls													
LED Interior													
SBD - Light Power Density													
Refrigeration		Subtotal											
Process		Subtotal											
Compressed Air													
Controls													
Cooling & Motors													
Custom													
Oil Well Pump-Off Controllers													
Pumps & Vacuums													
VSD													
Whole Building		Subtotal											
*Consumer Electronics Category Definition: Entertainment: Televisions, Set top boxes, Cable boxes, DVD, VCR, and Video Game Systems. Home Office: Desktop computer, Laptop Computer, Printers, Scanners, other computer peripherals. Other: Consumer Electronics not captured in the Entertainment and Home Office categories.													

Table 1.5 - Partnership Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.6 - Third Party Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
RESIDENTIAL													
		Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		Sum - Res	Sum - Res		
DEEMED MEASURES		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Appliances	UNIT	208,190		18,382	#DIV/0!		35,596,460	#DIV/0!		1,793,340	#DIV/0!	83%	11.00
Laundry & Kitchen Refrigerators	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Appliances Recycling	UNIT	141,697		13,136	#DIV/0!		57,671,019	#DIV/0!		(10,651)	#DIV/0!	66%	4.50
Refrigerators/Freezers	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Room A/C	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Residential Audits	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
Consumer Electronics	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
Entertainment													
Home Office													
Other													
Water Heating		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Efficiency	UNIT	13,185		-	#DIV/0!		-	#DIV/0!		78,376	#DIV/0!	58%	11.00
Use Reduction	UNIT	89,568		-	#DIV/0!		-	#DIV/0!		763,319	#DIV/0!	73%	11.00
Pool Pump	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	69%	10.00
Residential Other	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
HVAC		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
New Room AC	UNIT	12,118		1,292	#DIV/0!		837,037	#DIV/0!		-	#DIV/0!	90%	9.67
New Package, Split System AC, etc.	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Repair & Maintenance	UNIT	120,961		61,134	#DIV/0!		43,444,433	#DIV/0!		-	#DIV/0!	78%	10.00
HVAC Ducts	UNIT	77,579		6,087	#DIV/0!		4,556,515	#DIV/0!		822,956	#DIV/0!	78%	18.00
HVAC Envelope	UNIT	37,697,157		4,352	#DIV/0!		2,084,207	#DIV/0!		1,262,473	#DIV/0!	70%	20.00
HVAC Install - Operation	UNIT	27,594		-	#DIV/0!		-	#DIV/0!		30,198	#DIV/0!	66%	17.75
HVAC Controls	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
New Evap Coolers & Whole House Fans	UNIT	13,131		6,104	#DIV/0!		3,824,621	#DIV/0!		(107)	#DIV/0!	75%	16.67
Lighting		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
Screw-in CFL Interior (Downstream)	UNIT	56,878,968		159,609	#DIV/0!		975,145,574	#DIV/0!		(219,953)	#DIV/0!	60%	6.30
Screw-in CFL Interior (Upstream - Traditional)	UNIT	1,003,616		9,227	#DIV/0!		70,344,604	#DIV/0!		(3,711)	#DIV/0!	72%	17.00
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Screw-in CFL Interior (Direct Install)	UNIT	1,205,327		-	#DIV/0!		30,045,472	#DIV/0!		-	#DIV/0!	85%	16.00
Screw-in CFL Interior (Midstream)	UNIT	6,769		126	#DIV/0!		899,262	#DIV/0!		(170)	#DIV/0!	76%	16.00
Screw-in CFL Interior (Giveaway)	UNIT	89,179		1,639	#DIV/0!		13,276,955	#DIV/0!		-	#DIV/0!	76%	15.00
CFL Fixture Interior (Midstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
CFL Fixture Interior (Upstream)	UNIT	528,070		474	#DIV/0!		83,906,781	#DIV/0!		(617)	#DIV/0!	73%	13.83
CFL Fixture Interior (Direct Install)													
CFL Fixture Interior (Giveaway)	UNIT	3		7,039	#DIV/0!		10,474,448	#DIV/0!		993,931	#DIV/0!	70%	17.00
CFL Exterior	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	48%	19.00
CFL Fixture Exterior (Midstream)	UNIT	2		3,754	#DIV/0!		36,835,622	#DIV/0!		42,566	#DIV/0!	70%	11.00
CFL Fixture Exterior (Upstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
CFL Fixture Exterior (Direct Install)	UNIT	2		1,791	#DIV/0!		2,024,185	#DIV/0!		13,717	#DIV/0!	70%	11.50
LED Interior	UNIT	1		193	#DIV/0!		668,289	#DIV/0!		12,046	#DIV/0!	58%	9.00
Interior Controls	UNIT	1		13	#DIV/0!		40,685	#DIV/0!		6,973	#DIV/0!	70%	14.00
Interior Exit Signs		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Linear Fluorescents Interior		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Linear Fluorescents (parking structures) Exterior		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Interior Lighting		-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Exterior Lighting	UNIT	1,338		665	#DIV/0!		5,031,055	#DIV/0!		151,244	#DIV/0!	58%	10.18

Table 1.6 - Third Party Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.6 - Third Party Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
Refrigeration		Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		
CUSTOMIZED MEASURES	UNIT	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal		Subtotal	Subtotal	0%	-
HVAC Equipment	UNIT	7,324,120		-	#DIV/0!		-	#DIV/0!		246,041	#DIV/0!	50%	5.00
HVAC Envelope	UNIT	3,331		547	#DIV/0!		1,156,783	#DIV/0!		-	#DIV/0!	50%	20.00
Interior Lighting													
Exterior Lighting	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Whole Building	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other													
	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
NONRESIDENTIAL	UNIT	Sum - NonRes		10,248	#DIV/0!		33,615,252	#DIV/0!		-	#DIV/0!	61%	8.60
DEEMED MEASURES	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Audits	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Food Service	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Laundry General		Subtotal											
Agricultural		Subtotal											
Greenhouse	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Municipal Water	UNIT	Subtotal		23,669	#DIV/0!		66,210,822	#DIV/0!		(2,248)	#DIV/0!	68%	15.00
Process	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Pumping	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Refrigeration	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Casework	UNIT	26,861		2,317	#DIV/0!		2,256,345	#DIV/0!		-	#DIV/0!	50%	10.00
Compressors	UNIT	29,450		2,647	#DIV/0!		12,518,119	#DIV/0!		-	#DIV/0!	50%	15.00
Condenser	UNIT	5,479		2,367	#DIV/0!		2,082,802	#DIV/0!		25	#DIV/0!	50%	18.00
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Dist to others	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Other (Downstream)	UNIT	Subtotal		943	#DIV/0!		5,742,610	#DIV/0!		-	#DIV/0!	53%	10.00
Nonresidential Other (Upstream)		Subtotal											
Nonresidential Other (Direct Install)	UNIT	Subtotal		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Nonresidential Other (Pump Test)	UNIT	Subtotal		41,414	#DIV/0!		194,522,672	#DIV/0!		(55,530)	#DIV/0!	60%	2.80
HVAC	UNIT	Subtotal		2,176	#DIV/0!		14,350,868	#DIV/0!		-	#DIV/0!	74%	12.00
Commissioning	UNIT	19,881		374	#DIV/0!		2,675,911	#DIV/0!		(505)	#DIV/0!	77%	16.00
Retrocommissioning	UNIT	690,119		5,248	#DIV/0!		21,334,572	#DIV/0!		(6,850)	#DIV/0!	78%	7.00
New AC Equipment: packaged, split, etc. (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
New AC Equipment: packaged, split, etc. (Upstream)	UNIT	120,588		-	#DIV/0!		6,956,728	#DIV/0!		-	#DIV/0!	77%	11.40
New AC Equipment: packaged, split, etc. (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Chillers	UNIT	279,848		31,809	#DIV/0!		107,251,486	#DIV/0!		(19,457)	#DIV/0!	81%	9.44
Controls & VSDs	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Cooling Towers	UNIT	32,618		-	#DIV/0!		9,007,369	#DIV/0!		-	#DIV/0!	81%	12.00
RCA (Direct Install)													
RCA (Midstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Fans	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Ducts	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Other Ventilation	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Economizers	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Envelope (Downstream)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
Envelope (Direct Install)	UNIT	16,781		4,009	#DIV/0!		23,768,354	#DIV/0!		-	#DIV/0!	70%	15.00
HVAC Other (Downstream)													
HVAC Other (Direct Install)	UNIT	-		-	#DIV/0!		-	#DIV/0!		-	#DIV/0!	0%	-
HVAC Other (Midstream)	UNIT	690,273		-	#DIV/0!		-	#DIV/0!		5,799,348	#DIV/0!	47%	11.93

Table 1.6 - Third Party Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.6 - Third Party Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
Lighting		Subtotal											
Screw-in CFL Interior (Downstream)	UNIT	-		-	#DIV/0!	-	-	#DIV/0!	-	-	#DIV/0!	0%	-
Screw-in CFL Interior (Upstream - Traditional)	UNIT	45,716,467		28,920	#DIV/0!	129,391,164		#DIV/0!	3,379,177		#DIV/0!	73%	12.50
Screw-in CFL Interior (Upstream - Specialty)	UNIT	-		-	#DIV/0!	-	-	#DIV/0!	-	-	#DIV/0!	0%	-
Screw-in CFL Interior (Direct Install)	UNIT	192,972,537		59,526	#DIV/0!	344,530,027		#DIV/0!	18,741		#DIV/0!	62%	13.67
CFL Fixture Interior	UNIT	-		-	#DIV/0!	-	-	#DIV/0!	-	-	#DIV/0!	0%	-
Interior Exit Signs	UNIT	311,031,365		37,807	#DIV/0!	317,144,305		#DIV/0!	2,380,212		#DIV/0!	65%	14.33
Linear Fluorescents Interior (Downstream)	UNIT	483,127,480		75,728	#DIV/0!	568,462,203		#DIV/0!	43,608,130		#DIV/0!	70%	17.22
Linear Fluorescents Interior (Direct Install)	UNIT	5,163,815		943	#DIV/0!	4,647,434		#DIV/0!	-		#DIV/0!	90%	10.00
HID Interior	UNIT	19,808,870		4,465	#DIV/0!	13,866,209		#DIV/0!	-		#DIV/0!	70%	16.00
LED Interior	UNIT	5		1,458	#DIV/0!	15,983,233		#DIV/0!	111,521		#DIV/0!	69%	10.00
Interior Controls (Downstream)													
Interior Controls (Direct Install)	UNIT	154,800,000		52,210	#DIV/0!	296,150,000		#DIV/0!	5,410,000		#DIV/0!	100%	9.00
Interior Day Lighting													
Other Interior Lighting	UNIT			24,385	#DIV/0!	121,866,861		#DIV/0!	5,241,713		#DIV/0!	100%	Varies By Measure
CFL Lamp Exterior													
CFL Fixture Exterior											#DIV/0!		
Other Exterior Lighting													
Process		Subtotal											
Compressed Air													
Controls													
VSD													
Oil Well Pump-Off Controllers													
Custom													
Cooling & Motors													
Pumps & Vacuum													
Water Heating		Subtotal											
Efficiency													
Use Reduction													

Table 1.6 - Third Party Measure Grouping

SCENARIO 2 - BASE CASE

Table 1.6 - Third Party Measure Grouping Gross and NET Savings													
Measure Summary Categories	Unit Description (1*)	Unit Goals	Total Gross kW	Total Net kW	% Portfolio kW	Total Gross kWh Savings	Total Net kWh Savings	% Portfolio kWh	Total Gross Therms	Total Net Therms	% Portfolio Therms	Weighted Avg. NTG Ratio	Weighted Avg. EUL
CUSTOMIZED MEASURES		Sum Cust.											
HVAC		Subtotal											
Chillers													
Controls & VSDs													
Cool Roofs													
Cooling Towers													
Fans													
HVAC Other													
New AC Equipment: packaged, split, etc.													
Other Ventilation													
RCA													
Retrocommissioning													
Space Conditioning													
Exterior Lighting		Subtotal											
Customized Exterior Lighting													
Exterior Lighting Controls													
Interior Lighting		Subtotal											
Customized Interior Lighting													
Daylighting													
Interior Lighting System Modification													
Interior Lighting System Replacement													
Interior Controls													
LED Interior													
SBD - Light Power Density													
Refrigeration		Subtotal											
Process		Subtotal											
Compressed Air													
Controls													
Cooling & Motors													
Custom													
Oil Well Pump-Off Controllers													
Pumps & Vacuums													
VSD													
Whole Building		Subtotal											
*Consumer Electronics Category Definition: Entertainment: Televisions, Set top boxes, Cable boxes, DVD, VCR, and Video Game Systems. Home Office: Desktop computer, Laptop Computer, Printers, Scanners, other computer peripherals. Other: Consumer Electronics not captured in the Entertainment and Home Office categories.													

Table 1.6 - Third Party Measure Grouping

SCENARIO 2 - BASE CASE
Portfolio Cost-Effectiveness

Table 1.7 - Total Resource Cost (TRC)¹ - Gross

Total Costs	\$2,174,195,332
Total Savings (Benefits in \$)	\$3,250,397,541
Total Net Benefits	\$1,076,202,209
Benefit/Cost Ratio	1.49
Levelized Cost per kWh Saved (cents/kWh)	\$0.0779
Levelized Cost per therm Saved (\$/therm)	\$1.4149

1 - Components and methodologies of the TRC test defined in the Standard Practice Manual.

Table 1.7a - Total Resource Cost (TRC)¹ - NET

Total Costs	\$2,174,195,332
Total Savings (Benefits in \$)	\$3,250,397,541
Total Net Benefits	\$1,076,202,209
Benefit/Cost Ratio	1.49
Levelized Cost per kWh Saved (cents/kWh)	\$0.0779
Levelized Cost per therm Saved (\$/therm)	\$1.4149

1 - Components and methodologies of the TRC test defined in the Standard Practice Manual.

Note:

% Net Benefits

Total Electric Net Benefits	\$2,723,095,326	84%	Electric
Total Gas Net Benefits	\$527,302,215	16%	Gas
Total Net Benefits	\$3,250,397,541		

SCENARIO 2 - BASE CASE
Portfolio Cost-Effectiveness - Program Administrator Cost (PAC)

Table 1.8 - Program Administrator Cost (PAC)¹ - Gross

Total Costs	\$2,174,195,332
Total Savings (Benefits in \$)	\$3,250,397,541
Total Net Benefits	\$1,076,202,209
Benefit/Cost Ratio	1.49
Levelized Cost per kWh Saved (cents/kWh)	\$0.0779
Levelized Cost per therm Saved (\$/therm)	\$1.4149

1 - Components and methodologies of the PAC test defined in the Standard Practice Manual.

Table 1.8a - Program Administrator Cost (PAC)¹ - NET

Total Costs	\$2,174,195,332
Total Savings (Benefits in \$)	\$3,250,397,541
Total Net Benefits	\$1,076,202,209
Benefit/Cost Ratio	1.49
Levelized Cost per kWh Saved (cents/kWh)	\$0.0779
Levelized Cost per therm Saved (\$/therm)	\$1.4149

1 - Components and methodologies of the PAC test defined in the Standard Practice Manual.

Note:

% Net Benefits

Total Electric Net Benefits	\$2,723,095,326	84%	Electric
Total Gas Net Benefits	\$527,302,215	16%	Gas
Total Net Benefits	\$3,250,397,541		

SCENARIO 2 - BASE CASE

Table 1.9 - Program List				
Program Number	Program Name	Market Sector	Program Type	Program Status
PG&E-Core-001	Ag/Food Processing	Agriculture	Core Program	Revision of Existing Program
PG&E-Core-002	High Tech	Industrial	Core Program	Revision of Existing Program
PG&E-Core-003	Industrial	Industrial	Core Program	Revision of Existing Program
PG&E-Core-004	Commerical & Trade	Commercial	Core Program	Revision of Existing Program
PG&E-Core-005	Schools & Colleges	Commercial	Core Program	Revision of Existing Program
PG&E-Core-006	Hospitality & Health	Commercial	Core Program	Revision of Existing Program
PG&E-Core-007	Government & Public Service	Commercial	Core Program	Revision of Existing Program
PG&E-Core-008	Mass Market	Cross Cutting	Core Program	Revision of Existing Program
PG&E-Core-009	Codes & Standard	Cross Cutting	Core Program	New Program
PG&E-Core-010	LIEE	Residential	Core Program	Revision of Existing Program
PG&E-Core-011	Residential New Construction	Residential	Core Program	Revision of Existing Program
PG&E-GP-001	Association of Monterey Bay Area Governments (AMBAG) Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-002	City of San Joaquin Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-003	East Bay Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-004	Fresno City and County Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-005	Kern County Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-006	Madera County Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-007	Marin County Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-008	Mendocino County Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-009	Redwood Coast Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-010	San Francisco Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-011	San Joaquin County Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-012	San Luis Obispo Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-013	San Mateo County Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-014	Santa Barbara Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-015	Sierra Nevada Energy Watch	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-016	Silicon Valley Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-017	County of Sonoma Energy Watch	Cross Cutting	Cross Cutting	New Program
PG&E-GP-018	Other Future Channels/Local Govt Energy Action Res (LGEAR)	Cross Cutting	Cross Cutting	Existing Program
PG&E-GP-019	Statewide Government Partnerships (1- California Community Colleges, 2- University of California/California State University, 3- State of California, 4- Department of Corrections and Rehabilitation)	Commercial	Commercial	Existing Program

Table 1.9 - Program List

SCENARIO 2 - BASE CASE

Program Number	Program Name	Market Sector	Program Type	Program Status
PG&E-GP-020	Green Communities	Cross Cutting	Cross Cutting	New Program
PG&E-TP-001	Campus Housing Efficiency Solutions (CHES)	Commercial	Cross Cutting	Existing Program
PG&E-TP-002	School Energy Efficiency (SEE)	Commercial	Cross Cutting	Existing Program
PG&E-TP-003	California Preschool Energy Efficiency	Commercial	Cross Cutting	Existing Program
PG&E-TP-004	LodgingSavers	Commercial	Cross Cutting	Existing Program
PG&E-TP-005	Cool Controls Plus	Commercial	Cross Cutting	Existing Program
PG&E-TP-006	EnergySmart Grocer	Commercial	Cross Cutting	Existing Program
PG&E-TP-007	Air Care Plus	Commercial	Cross Cutting	Existing Program
PG&E-TP-008	Monitoring-Based Persistence Commissioning (MBPCx)	Commercial	Cross Cutting	Existing Program
PG&E-TP-009	Retro-Commissioning Services and Incentives	Commercial	Cross Cutting	Existing Program
PG&E-TP-010	Enhanced Automation Initiative	Commercial	Cross Cutting	Existing Program
PG&E-TP-011	Boiler Energy Efficiency	Commercial	Cross Cutting	Existing Program
PG&E-TP-012	Energy Efficiency Partnership for California State-Leased Facilities	Commercial	Cross Cutting	Existing Program

Table 1.9 - Program List

SCENARIO 2 - BASE CASE

Program Number	Program Name	Market Sector	Program Type	Program Status
PG&E-TP-013	Industrial Compressed Air	Industrial	Cross Cutting	Existing Program
PG&E-TP-014	AIM - Compressed Air Efficiency	Industrial	Cross Cutting	Existing Program
PG&E-TP-015	Energy Efficiency Services for Oil Production	Industrial	Cross Cutting	Existing Program
PG&E-TP-016	Refinery Energy Efficiency Program (REEP)	Industrial	Cross Cutting	Existing Program
PG&E-TP-017	California Wastewater Process Optimization Program (Cal POP)	Industrial	Cross Cutting	Existing Program
PG&E-TP-018	Heavy Industry Energy Efficiency	Industrial	Cross Cutting	Existing Program
PG&E-TP-019	VESM Advantage Plus	Industrial	Cross Cutting	Existing Program
PG&E-TP-020	Industrial Refrigeration Performance Plus	Industrial	Cross Cutting	Existing Program
PG&E-TP-021	Wine Industry Efficiency Solutions (WEIS)	Agriculture	Cross Cutting	Existing Program
PG&E-TP-022	Light Exchange	Agriculture	Cross Cutting	Existing Program
PG&E-TP-023	Dairy Energy Efficiency Program	Agriculture	Cross Cutting	Existing Program
PG&E-TP-024	Laboratory Airflow and Fume Hood Control Systems	Industrial	Cross Cutting	Existing Program
PG&E-TP-025	Comprehensive Retail Energy Management	Commercial	Cross Cutting	Existing Program
PG&E-TP-026	Medical Building Tune-up (MBTU)	Commercial	Cross Cutting	Existing Program
PG&E-TP-027	California Multifamily New Homes	Residential	Cross Cutting	Existing Program
PG&E-TP-028	RightLights	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-029	Small Commercial Comprehensive Refrigeration Program	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-030	Energy Savers	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-031	Energy Fitness	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-032	Enhanced Time Delay Relay	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-033	Builder Energy Code Training	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-034	Green Building Technical Support	Crosscutting	Cross Cutting	Existing Program
PG&E-TP-035	Industrial Recommissioning	Industrial	Cross Cutting	New Program
PG&E-TP-036	Cement Production & Distribution Energy Efficiency (CPD)	Industrial	Cross Cutting	New Program
PG&E-TP-037	Energy Efficient Parking Garage	Commercial	Cross Cutting	New Program
PG&E-TP-038	LED Accelerator	Commercial	Cross Cutting	New Program
PG&E-TP-039	Monitoring-Based Commissioning	Commercial	Cross Cutting	New Program
PG&E-TP-040	Healthcare Energy Efficiency Program	Commercial	Cross Cutting	New Program
PG&E-TP-041	Furniture Store Energy Efficiency	Commercial	Cross Cutting	New Program
PG&E-TP-042	SmartVent for Energy Efficient Kitchens.	Commercial	Cross Cutting	New Program
PG&E-TP-043	Process Wastewater Treatment Energy Management Program for Agriculture and	Agriculture	Cross Cutting	New Program
PG&E-TP-044	Hospitality Steam Systems	Commercial	Cross Cutting	New Program
PG&E-TP-045	Healthcare Gas Efficiency	Commercial	Cross Cutting	New Program
PG&E-TP-046	ENERGY STAR Manufactured Homes	Residential	Cross Cutting	New Program
PG&E-TP-047	Energy Efficiency Program for Entertainment Centers	Commercial	Cross Cutting	New Program
PG&E-TP-048	Cool Schools	Commercial	Cross Cutting	New Program

Table 1.9 - Program List

SCENARIO 2 - BASE CASE

Program Number	Program Name	Market Sector	Program Type	Program Status
PG&E-TP-049	K-12 Private Schools and Colleges Audit and Retrofit	Commercial	Cross Cutting	New Program
PG&E-TP-050	Comprehensive Food Processing Audit and Resource Efficiency Program	Agriculture	Cross Cutting	New Program
PG&E-TP-051	High Performance Office Lighting	Commercial	Cross Cutting	New Program
PG&E-TP-052	Casino Green	Commercial	Cross Cutting	New Program
PG&E-TP-053	Small Commercial Boiler Repair and Tune-up	Crosscutting	Cross Cutting	New Program
PG&E-TP-054	Dairy Industry Resource Advantage	Agriculture	Cross Cutting	New Program
PG&E-TP-055	Ozone Laundry Energy Efficiency	Commercial	Cross Cutting	New Program
PG&E-TP-056	Cool Cash	Commercial	Cross Cutting	New Program
PG&E-TP-057	Direct Install for Manufactured and Mobile Homes	Crosscutting	Cross Cutting	New Program

Table 1.9 - Program List

SCENARIO 2 - BASE CASE

Table 2.1 - Annual Electric Environmental Benefits - Gross \$15.50/tonne				
Electric Emission Reduction	2009	2010	2011	Total
CO2 (tons)	535,104	593,965	654,610	1,783,679
NOx (lbs.)	146,860	163,015	179,659	489,534
PM10 (lbs.)	68,460	75,991	83,750	228,201

* Calculated by the E3 Calculator.

Table 2.1a Annual Electric Environmental Benefits - Gross \$30/Tonne				
CO2 (tons)	535,104	593,965	654,610	1,783,679
NOx (lbs.)	146,860	163,015	179,659	489,534
PM10 (lbs.)	68,460	75,991	83,750	228,201

Table 2.2 - Annual Gas Environmental Benefits - Gross \$15.50/Tonne				
Electric Emission Reduction	2009	2010	2011	Total
CO2 (tons)	535,104	593,965	654,610	1,783,679
NOx (lbs.)	146,860	163,015	179,659	489,534
PM10 (lbs.)	68,460	75,991	83,750	228,201

* Calculated by the E3 Calculator.

Table 2.2a Annual Gas Environmental Benefits - Gross \$30/Tonne				
CO2 (tons)	535,104	593,965	654,610	1,783,679
NOx (lbs.)	146,860	163,015	179,659	489,534
PM10 (lbs.)	68,460	75,991	83,750	228,201

* Calculated by the E3 Calculator.

Table 2.3 - Lifecycle Environmental Benefits - Gross \$15.50/Tonne			
Emission Reduction		Electric	Gas
CO2 (tons)		593,965	654,610
NOx (lbs.)		163,015	179,659
PM10 (lbs.)		75,991	83,750

* Calculated by the E3 Calculator.

Table 2.3a Lifecycle Environmental Benefits - Gross \$30/Tonne			

* Calculated by the E3 Calculator.

SCENARIO 2 - BASE CASE

Table 2.4 - 2009-2011 Green Building Initiative (GBI) Summary, \$15.50/tonne		GHG Carbon			Gross Savings		
Programs Contributing to the GBI	Budget(1)	Program Impacts			Emissions Reduction		
		Energy Savings (Gross kWh)	Demand Reduction (Gross kW)	Gas Savings (Gross Therms)	CO2 (tons)	Nox (lbs.)	PM10 (lbs.)
PG&E Core Programs (Commercial Sector Only)	\$ 84,089,106	277,253,479	74,251	10,328,879	203,603	144,202	18,342
California State Government Buildings	\$ 18,678,197	4,294,266	715	3,736,174	24,074	38,621	284
Federal & Local Government Buildings	\$ 16,718,422	26,623,273	19,548	659,466	17,607	10,465	1,761
Commercial Buildings	\$ 48,692,487	246,335,940	53,988	5,933,238	161,922	95,116	16,296
PG&E Government Partnerships	\$ 28,292,829	111,672,457	21,701	125,448	58,404	17,028	7,388
California State Government Buildings	\$ 64,430	256,275	28	-	132	36	17
Federal & Local Government Buildings	\$ 2,266,920	8,628,785	1,512	3,310	4,475	1,251	571
Commercial Buildings	\$ 25,961,478	102,787,398	20,161	122,138	53,796	15,741	6,800
PG&E Third Parties	\$ 41,234,480	183,309,141	37,625	441,925	97,250	30,353	12,127
California State Government Buildings	\$ 41,309	307,095	202	2,002	170	64	20
Federal & Local Government Buildings	\$ 2,777,157	11,896,437	2,803	28,313	6,309	1,966	787
Commercial Buildings	\$ 38,416,014	171,105,608	34,621	411,610	90,770	28,323	11,320
Grand Total	\$ 153,616,415	572,235,077	133,577	10,896,252	359,257	191,583	37,857
California State Government Buildings Total	\$ 18,783,936	4,857,636	945	3,738,177	24,377	38,720	321
Federal & Local Government Buildings Total	\$ 21,762,500	47,148,494	23,862	691,090	28,391	13,682	3,119
Commercial Buildings Total	\$ 113,069,979	520,228,946	108,770	6,466,986	306,489	139,180	34,416

(1) Budget contains incentives to participants only.

(2) Forecast program impacts are derived from 2007 GBI accomplishments.

Table 2.4a - 2009-2011 Green Building Initiative (GBI), \$30/tonne GHG Carbon Gross Savings		Gross Savings			Emissions Reduction		
Programs Contributing to the GBI	Budget(1)	Program Impacts			Emissions Reduction		
		Energy Savings (Gross kWh)	Demand Reduction (Gross kW)	Gas Savings (Gross Therms)	CO2 (tons)	Nox (lbs.)	PM10 (lbs.)
PG&E Core Programs (Commercial Sector Only)	\$ 84,089,106	277,253,479	74,251	10,328,879	203,603	144,202	18,342
California State Government Buildings	\$ 18,678,197	4,294,266	715	3,736,174	24,074	38,621	284
Federal & Local Government Buildings	\$ 16,718,422	26,623,273	19,548	659,466	17,607	10,465	1,761
Commercial Buildings	\$ 48,692,487	246,335,940	53,988	5,933,238	161,922	95,116	16,296
PG&E Government Partnerships	\$ 28,292,829	111,672,457	21,701	125,448	58,404	17,028	7,388
California State Government Buildings	\$ 64,430	256,275	28	-	132	36	17
Federal & Local Government Buildings	\$ 2,266,920	8,628,785	1,512	3,310	4,475	1,251	571
Commercial Buildings	\$ 25,961,478	102,787,398	20,161	122,138	53,796	15,741	6,800
PG&E Third Parties	\$ 41,234,480	183,309,141	37,625	441,925	97,250	30,353	12,127
California State Government Buildings	\$ 41,309	307,095	202	2,002	170	64	20
Federal & Local Government Buildings	\$ 2,777,157	11,896,437	2,803	28,313	6,309	1,966	787
Commercial Buildings	\$ 38,416,014	171,105,608	34,621	411,610	90,770	28,323	11,320
Grand Total	\$ 153,616,415	572,235,077	133,577	10,896,252	359,257	191,583	37,857
California State Government Buildings Total	\$ 18,783,936	4,857,636	945	3,738,177	24,377	38,720	321
Federal & Local Government Buildings Total	\$ 21,762,500	47,148,494	23,862	691,090	28,391	13,682	3,119
Commercial Buildings Total	\$ 113,069,979	520,228,946	108,770	6,466,986	306,489	139,180	34,416

(1) Budget contains incentives to participants only.

(2) Forecast program impacts are derived from 2007 GBI accomplishments.

SCENARIO 2 - BASE CASE

Table 3.1 - PG&E 2009-2011 Projected Gross Cumulative Savings Impacts by Year

	2009			2010			2011		
	Total	CPUC Goal	% of 2009 Goal	Total	CPUC Goal	% of 2010 Goal	Total	CPUC Goal	% of 2011 Goal
Energy Savings (Gross GWh)	1,109	1,067	104%	2,344	2,082	113%	3,695	3,168	117%
Demand Reduction (Gross MW)	213	232	92%	450	452	100%	709	688	103%
Gas Savings (Gross MMTh)	21.5	20.3	106%	45.5	41.4	110%	71.8	63.4	113%

Note: Cumulative Savings Impacts of the 2009-2011 program cycle only.

Use DEER 2009-2011 ex ante Update

SCENARIO 2 - BASE CASE

Table 3.2 - PG&E Total Projected Cumulative Savings Impacts by Year Started in 2004

	2009			2010			2011		
	Total	CPUC Goal	% of 2009 Goal	Total	CPUC Goal	% of 2010 Goal	Total	CPUC Goal	% of 2011 Goal
Energy Savings (Net GWh)	3,845	5,381	71%	5,080	6,396	79%	6,431	7,483	86%
Demand Reduction (Net MW)	859	1,168	74%	1,096	1,388	79%	1,355	1,624	83%
Gas Savings (Net MMTh)	98.2	84.8	116%	122.3	105.9	116%	148.6	127.8	116%

Note: Cumulative Savings Impacts started in 2004, consistent with CPUC energy savings goals from D.04-09-060.

USE the following DEER Values -

- For 2004-2005** EM&V Results to be used if available. If not, EEGA-reported results are to be used
- For 2006-2007** 2008 DEER Update - 2008 October DEER
- For 2008** 2008 DEER Update - 2008 October DEER
- For 2009-2011** 2009-2011 DEER ex ante numbers - 2008 December DEER Update

Note: If verified savings for 2006-2007 are available and settled, then use those savings

2004-2008 = Net
 2009-2011 = Gross

Table 3.2 - 2004-11 Cumulative Savings

SCENARIO 2 - BASE CASE

Table 3.3 - 2009-11 Projected Lifecycle Savings - Gross

	Lifecycle Savings
Energy Savings (Gross GWh)	35,899
Gas Savings (Gross MMTh)	1,038

Table 3.3 2009-11 Lifecycle Savings

SCENARIO 2 - BASE CASE

Table 3.4 - Third Party Programs (3P) Competitively Solicited Programs - Gross

	Program Name	Proposal Amount ¹	Energy Savings (Gross kWh)	Demand Reduction (Net kW)	Gas Savings (Gross Therms)	
Continuation Program from 2006-2008	Campus Housing Efficiency Solutions (CHES)	\$1,587,500	2,190,000	430	-	
	School Energy Efficiency (SEE)	\$3,002,858	4,410,000	1,300	25,000	
	California Preschool Energy Efficiency	\$2,227,400	5,087,000	1,104	-	
	LodgingSavers	\$7,734,165	16,979,605	4,105	238,094	
	Cool Controls Plus	\$11,999,506	24,513,338	5,289	162,688	
	EnergySmart Grocer	\$16,005,489	69,016,079	7,337	57,340	
	Air Care Plus	\$7,200,000	20,000,000	2,500	40,000	
	Monitoring-Based Persistence Commissioning (MBPCx)	\$3,337,500	7,875,000	473	131,250	
	Retro-Commissioning Services and Incentives	\$10,000,000	26,687,575	1,861	266,730	
	Enhanced Automation Initiative	\$2,000,000	10,865,947	1,880	254,263	
	Boiler Energy Efficiency	\$10,053,803	1,454,754	304	3,188,174	
	Energy Efficiency Partnership for California State-Leased Facilities	\$1,008,250	1,942,500	117	32,375	
	Industrial Compressed Air	\$4,525,560	14,000,000	1,598	-	
	AIM - Compressed Air Efficiency	\$5,200,000	28,000,000	3,500	-	
	Energy Efficiency Services for Oil Production	\$18,965,153	105,000,000	11,986	-	
	Refinery Energy Efficiency Program (REEP)	\$13,500,000	38,850,000	5,801	1,575,000	
	California Wastewater Process Optimization Program (Cal POP)	\$2,088,597	3,600,000	360	141,000	
	Heavy Industry Energy Efficiency	\$27,617,178	41,600,000	5,298	4,160,000	
	VESM Advantage Plus	\$2,245,000	5,600,000	214	400,750	
	Industrial Refrigeration Performance Plus	\$6,160,930	21,000,000	2,673	140,000	
	Wine Industry Efficiency Solutions (WEIS)	\$2,368,315	2,550,746	698	152,250	
	Light Exchange	\$2,372,135	3,115,613	-	-	
	Dairy Energy Efficiency Program	\$1,500,000	6,123,528	1,269	5,086	
	Laboratory Airflow and Fume Hood Control Systems	\$2,125,050	4,433,100	556	243,600	
	Comprehensive Retail Energy Management	\$2,474,647	13,354,873	3,788	97,629	
	Medical Building Tune-up (MBTU)	\$2,922,857	5,888,000	902	256,000	
	California Multifamily New Homes	\$6,434,534	3,051,000	2,380	344,000	
	RightLights	\$16,355,190	52,758,676	7,756	2,148	
	Small Commercial Comprehensive Refrigeration Program	\$5,500,000	21,915,485	2,672	-	
	Energy Savers	\$4,050,330	10,221,624	2,027	-	
	Energy Fitness	\$8,430,566	38,926,960	8,628	-	
	Enhanced Time Delay Relay	\$2,244,122	2,858,881	4,455	-	
	Builder Energy Code Training	\$1,359,078				
	Green Building Technical Support	\$1,592,200				
	Flight 1	Industrial Recommissioning	\$4,376,244	7,007,633	804	1,260,955
		Cement Production & Distribution Energy Efficiency (CPD)	\$5,117,562	30,396,567	3,005	477,540
		Energy Efficient Parking Garage	\$3,030,826	16,068,520	2,212	-
		LED Accelerator	\$4,018,558	11,090,450	2,218	-
		Monitoring-Based Commissioning	\$5,300,000	16,800,000	3,360	1,680,000
		Healthcare Energy Efficiency Program	\$5,513,599	14,214,982	3085	245,582
		Furniture Store Energy Efficiency	\$5,052,267	30,863,785	11,721	-
		SmartVent for Energy Efficient Kitchens.	\$8,500,850	20,025,945	2,163	1,196,462
	Flight 2	Process Wastewater Treatment Energy Management Program for Agriculture and Food Processing	\$2,496,416	14,943,386	859	-
		Hospitality Steam Systems	\$1,999,763	151,905	30	422,223
		Healthcare Gas Efficiency	\$999,947	229,950	50	237,744
		ENERGY STAR Manufactured Homes	\$2,000,000	3,623,256	1,674	122,850
		Energy Efficiency Program for Entertainment Centers	\$2,952,020	5,771,795	4,091	713,872
Cool Schools		\$2,002,064	8,137,820	3,607	(47,736)	
K-12 Private Schools and Colleges Audit and Retrofit		\$1,987,799	7851412	2388	77,391	
Flight 3	Comprehensive Food Processing Audit and Resource Efficiency Program	\$5,000,000	6,944,002	550	1,636,402	
	High Performance Office Lighting	\$9,994,250	28,350,000	6,150	-	
	Casino Green	\$4,371,900	7,810,617	2,086	199,720	
	Small Commercial Boiler Repair and Tune-up	\$999,344	99,567	20	204,527	
Flight 4	Dairy Industry Resource Advantage	\$2,000,000	4,903,226	831	70,031	
	Ozone Laundry Energy Efficiency	\$1,999,500	-	-	1,001,000	
	Cool Cash	\$1,500,000	6,135,000	1,154	729	
	Direct Install for Manufactured and Mobile Homes	\$2,500,000	4,224,636	2,398	55,000	
	Total 3P Portfolio	\$ 299,900,822	859,514,737	147,716	21,467,669	
	Total Core Programs	\$ 851,572,263	2,512,937,288	508,939	46,915,970	
	Total Portfolio	\$ 1,151,473,084	3,372,452,025	656,655	68,383,639	
	Percentage of Total Portfolio	26%	25%	22%	31%	

1 - Pending Contract Negotiations

2 - The Third Party budgets in Table 3.4 exclude PG&E administrative costs

Table 3.4 - 3P Programs

SCENARIO 2 - BASE CASE

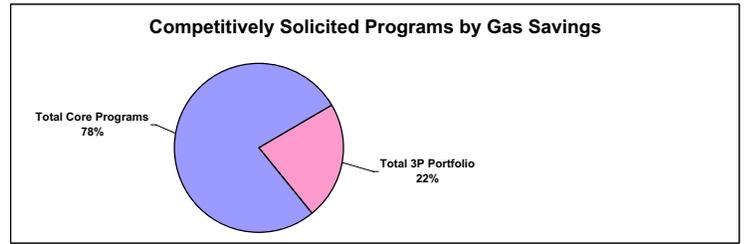
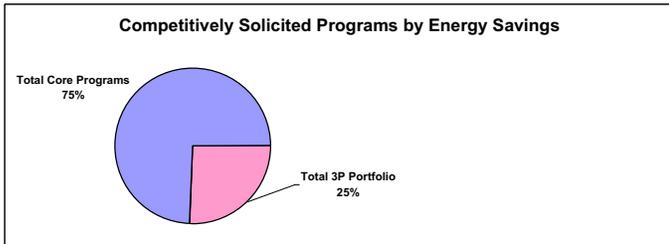
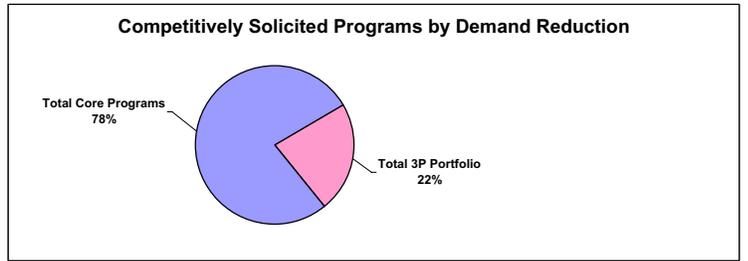
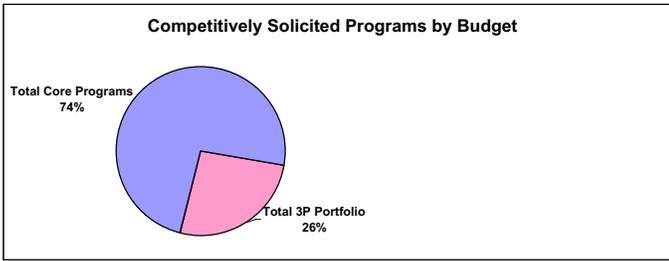


Table 3.4 - 3P Programs

SCENARIO 2 - BASE CASE

Table 3.5 - Government Partnerships - Gross

Program Name	Proposal Amount ¹ ₂	Energy Savings (Net kWh)	Demand Reduction (Net kW)	Gas Savings (Net Therms)
Association of Monterey Bay Area Governments (AMBAG) Energy Watch	\$8,645,000	18,001,401	2,326	20,243
City of San Joaquin Energy Watch	\$500,000	905,470	107	1,701
East Bay Energy Watch	\$14,500,000	31,894,636	3,730	51,550
Fresno City and County Energy Watch	\$6,000,000	12,602,028	1,828	34,098
Kern County Energy Watch	\$5,950,000	10,282,244	1,365	13,119
Madera County Energy Watch	\$442,000	819,426	96	1,361
Marin County Energy Watch	\$3,042,018	5,401,780	702	21,981
Mendocino County Energy Watch	\$503,367	826,130	101	9,329
Redwood Coast Energy Watch	\$3,000,000	5,563,854	1,155	5,036
San Francisco Energy Watch	\$12,000,000	22,045,030	2,805	35,451
San Joaquin County Energy Watch	\$3,000,000	5,685,778	597	8,164
San Luis Obispo Energy Watch	\$2,000,000	3,451,950	445	0
San Mateo County Energy Watch	\$3,500,000	6,750,313	834	15,212
Santa Barbara Energy Watch	\$2,000,000	3,558,539	450	0
Sierra Nevada Energy Watch	\$5,000,000	9,903,392	1,330	9,914
Silicon Valley Energy Watch	\$10,000,000	19,528,305	2,431	41,598
County of Sonoma Energy Watch	\$2,750,993	5,581,593	671	22,187
Other Future Channels/Local Govt Energy Action Res (LGEAR)	\$22,166,622	7,539,201	883	11,158
Statewide Government Partnerships 1- California Community Colleges 2- University of California/California State University 3- State of California 4- Department of Corrections and Rehabilitation	\$35,000,000	47,143,915	8,272	2,221,538
Green Communities	\$12,500,000	NA	NA	NA
Total Government Partnerships Portfolio	\$ 152,500,000	217,484,985	30,128	2,523,640

1 - Pending Contract Negotiations

2 - The Government partnership budgets in Table 3.5 exclude PG&E administrative costs

Table 3.5 - Partnerships

SCENARIO 2 - BASE CASE

Table 4.1 - PG&E Portfolio Budget											
	2009 Budget		2010 Budget		2011 Budget		Total 2009-2011 Program Cycle Budget		Total 2009-2011 Program Cycle Budget	Percent of Budget (without EM&V)	Percent of Budget (with EM&V)
PG&E Programs	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas			
Core Programs											
Ag/Food Processing	\$ 13,057,345	\$ 2,674,396	\$ 14,474,670	\$ 2,964,691	\$ 16,031,393	\$ 3,283,538	\$ 43,563,409	\$ 8,922,626	\$ 52,486,035		
High Tech	\$ 9,189,657	\$ 1,882,219	\$ 10,393,207	\$ 2,128,729	\$ 11,084,587	\$ 2,270,337	\$ 30,667,452	\$ 6,281,285	\$ 36,948,737		
Industrial	\$ 18,653,407	\$ 3,820,577	\$ 20,225,211	\$ 4,142,513	\$ 21,844,929	\$ 4,474,262	\$ 60,723,546	\$ 12,437,353	\$ 73,160,899		
Commercial & Trade	\$ 12,519,243	\$ 2,564,182	\$ 13,675,057	\$ 2,800,915	\$ 14,843,368	\$ 3,040,208	\$ 41,037,668	\$ 8,405,305	\$ 49,442,974		
Schools & Colleges	\$ 3,762,221	\$ 770,575	\$ 4,148,680	\$ 849,730	\$ 4,328,138	\$ 886,486	\$ 12,239,040	\$ 2,506,791	\$ 14,745,832		
Hospitality & Health	\$ 8,403,865	\$ 1,721,274	\$ 10,177,650	\$ 2,084,579	\$ 12,361,227	\$ 2,531,818	\$ 30,942,742	\$ 6,337,670	\$ 37,280,413		
Government & Public Service	\$ 12,328,972	\$ 2,525,211	\$ 13,484,786	\$ 2,761,944	\$ 14,653,097	\$ 3,001,237	\$ 40,466,855	\$ 8,288,392	\$ 48,755,247		
Mass Market	\$ 136,612,119	\$ 27,980,796	\$ 148,837,162	\$ 30,484,720	\$ 161,714,984	\$ 33,122,346	\$ 447,164,265	\$ 91,587,862	\$ 538,752,127		
Codes & Standards	\$ 5,281,833	\$ 1,081,821	\$ 5,377,730	\$ 1,101,463	\$ 5,342,523	\$ 1,094,252	\$ 16,002,085	\$ 3,277,536	\$ 19,279,621		
Integrated Energy Audits	\$ 7,345,030	\$ 1,504,404	\$ 7,953,978	\$ 1,629,128	\$ 7,922,947	\$ 1,622,772	\$ 23,221,955	\$ 4,756,304	\$ 27,978,259		
On-Bill Financing	\$ 10,254,082	\$ 2,100,234	\$ 5,046,328	\$ 1,033,585	\$ 5,416,773	\$ 1,109,460	\$ 20,717,183	\$ 4,243,278	\$ 24,960,462		
Implementation Reserve	\$ 8,300,000	\$ 1,700,000	\$ 8,300,000	\$ 1,700,000	\$ 8,300,000	\$ 1,700,000	\$ 24,900,000	\$ 5,100,000	\$ 30,000,000		
Core Programs Total	\$ 245,707,776	\$ 50,325,689	\$ 262,094,460	\$ 53,681,998	\$ 283,843,966	\$ 58,136,716	\$ 791,646,202	\$ 162,144,403	\$ 953,790,605	54.5%	50.9%
Government Partnerships Programs											
Association of Monterey Bay Area Governments (AMBAG) Energy Watch	\$ 2,490,748	\$ 510,153	\$ 2,784,275	\$ 570,273	\$ 3,212,449	\$ 657,972	\$ 8,487,472	\$ 1,738,398	\$ 10,225,870		
City of San Joaquin Energy Watch	\$ 185,564	\$ 38,007	\$ 147,120	\$ 30,133	\$ 131,680	\$ 26,971	\$ 464,364	\$ 95,111	\$ 559,475		
East Bay Energy Watch	\$ 4,621,278	\$ 946,527	\$ 5,080,213	\$ 1,040,526	\$ 4,534,292	\$ 928,711	\$ 14,235,783	\$ 2,915,763	\$ 17,151,546		
Fresno City and County Energy Watch	\$ 1,957,984	\$ 401,033	\$ 1,963,497	\$ 402,162	\$ 1,969,188	\$ 403,328	\$ 5,890,669	\$ 1,206,523	\$ 7,097,191		
Kern County Energy Watch	\$ 1,929,879	\$ 395,276	\$ 2,014,921	\$ 412,695	\$ 1,896,781	\$ 388,497	\$ 5,841,580	\$ 1,196,468	\$ 7,038,048		
Madera County Energy Watch	\$ 144,238	\$ 29,543	\$ 144,644	\$ 29,626	\$ 145,063	\$ 29,712	\$ 433,946	\$ 88,880	\$ 522,826		
Marin County Energy Watch	\$ 1,402,329	\$ 287,224	\$ 1,482,415	\$ 303,627	\$ 101,841	\$ 20,859	\$ 2,986,585	\$ 611,710	\$ 3,598,295		
Mendocino County Energy Watch	\$ 170,051	\$ 34,830	\$ 166,090	\$ 34,018	\$ 157,724	\$ 32,305	\$ 493,866	\$ 101,153	\$ 595,019		
Redwood Coast Energy Watch	\$ 983,938	\$ 201,529	\$ 980,100	\$ 200,743	\$ 981,297	\$ 200,988	\$ 2,945,334	\$ 603,261	\$ 3,548,596		
San Francisco Energy Watch	\$ 4,149,032	\$ 849,802	\$ 4,108,071	\$ 841,412	\$ 3,524,235	\$ 721,831	\$ 11,781,338	\$ 2,413,045	\$ 14,194,383		
San Joaquin County Energy Watch	\$ 978,992	\$ 200,516	\$ 981,749	\$ 201,081	\$ 984,594	\$ 201,664	\$ 2,945,334	\$ 603,261	\$ 3,548,596		
San Luis Obispo Energy Watch	\$ 655,608	\$ 134,281	\$ 657,446	\$ 134,658	\$ 650,501	\$ 133,235	\$ 1,963,556	\$ 402,174	\$ 2,365,730		
San Mateo County Energy Watch	\$ 1,056,689	\$ 216,430	\$ 1,115,165	\$ 228,407	\$ 1,264,370	\$ 258,967	\$ 3,436,224	\$ 703,805	\$ 4,140,028		
Santa Barbara Energy Watch	\$ 655,608	\$ 134,281	\$ 657,446	\$ 134,658	\$ 650,501	\$ 133,235	\$ 1,963,556	\$ 402,174	\$ 2,365,730		
Sierra Nevada Energy Watch	\$ 1,488,714	\$ 304,917	\$ 1,598,303	\$ 327,363	\$ 1,821,874	\$ 373,155	\$ 4,908,891	\$ 1,005,435	\$ 5,914,326		
Silicon Valley Energy Watch	\$ 2,675,245	\$ 547,942	\$ 3,331,683	\$ 682,393	\$ 3,810,854	\$ 780,536	\$ 9,817,781	\$ 2,010,871	\$ 11,828,652		
County of Sonoma Energy Watch	\$ 550,777	\$ 112,810	\$ 1,180,495	\$ 241,788	\$ 969,496	\$ 198,571	\$ 2,700,768	\$ 553,169	\$ 3,253,937		
Other Future Channels/Local Govt Energy Action Res (LGEAR)	\$ 6,738,437	\$ 1,380,162	\$ 6,749,621	\$ 1,382,453	\$ 6,761,164	\$ 1,384,817	\$ 20,249,222	\$ 4,147,431	\$ 24,396,653		
Statewide Government Partnerships (UC/CSU, California Department of Corrections and Rehabilitation (CDCR), State of California, and California Community Colleges)	\$ 11,316,202	\$ 2,317,776	\$ 11,345,302	\$ 2,323,737	\$ 11,375,333	\$ 2,329,888	\$ 34,036,838	\$ 6,971,400	\$ 41,008,238		
Green Communities	\$ 4,620,502	\$ 946,368	\$ 4,643,592	\$ 951,097	\$ 4,805,895	\$ 984,340	\$ 14,069,989	\$ 2,881,805	\$ 16,951,794		
Government Partnerships Programs Total	\$ 48,771,815	\$ 9,989,408	\$ 51,132,149	\$ 10,472,850	\$ 49,749,132	\$ 10,189,581	\$ 149,653,096	\$ 30,651,839	\$ 180,304,935	10.3%	9.6%

TABLE 4.1 - PORTFOLIO BUDGET

SCENARIO 2 - BASE CASE

PG&E Programs	2009 Budget		2010 Budget		2011 Budget		Total 2009-2011 Program Cycle Budget		Total 2009-2011 Program Cycle Budget	Percent of Budget (without EM&V)	Percent of Budget (with EM&V)
	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas			
Third Party Programs											
Campus Housing Efficiency Solutions (CHES)	\$ 471,056	\$ 96,481	\$ 489,162	\$ 100,190	\$ 532,240	\$ 109,013	\$ 1,492,458	\$ 305,684	\$ 1,798,142		
School Energy Efficiency (SEE)	\$ 838,146	\$ 171,669	\$ 892,934	\$ 182,890	\$ 1,016,934	\$ 208,288	\$ 2,748,015	\$ 562,846	\$ 3,310,861		
California Preschool Energy Efficiency Program	\$ 772,085	\$ 158,138	\$ 771,550	\$ 158,028	\$ 501,692	\$ 102,756	\$ 2,045,327	\$ 418,922	\$ 2,464,250		
LodgingSavers	\$ 2,162,228	\$ 442,866	\$ 2,587,364	\$ 529,942	\$ 2,163,811	\$ 443,190	\$ 6,913,403	\$ 1,415,998	\$ 8,329,401		
Cool Controls Plus	\$ 3,558,952	\$ 728,942	\$ 3,557,700	\$ 728,686	\$ 3,560,159	\$ 729,189	\$ 10,676,811	\$ 2,186,817	\$ 12,863,628		
EnergySmart Grocer	\$ 4,144,690	\$ 848,912	\$ 4,685,913	\$ 959,765	\$ 5,286,153	\$ 1,082,706	\$ 14,116,756	\$ 2,891,384	\$ 17,008,139		
Air Care Plus	\$ 1,610,212	\$ 329,802	\$ 2,234,427	\$ 457,654	\$ 2,549,507	\$ 522,188	\$ 6,394,146	\$ 1,309,644	\$ 7,703,790		
Monitoring-Based Persistence Commissioning (MBPCx)	\$ 529,038	\$ 108,357	\$ 1,127,893	\$ 231,014	\$ 1,351,071	\$ 276,725	\$ 3,008,002	\$ 616,097	\$ 3,624,099		
Retro-Commissioning Services and Incentives	\$ 2,999,954	\$ 614,448	\$ 3,363,554	\$ 688,921	\$ 2,487,070	\$ 509,400	\$ 8,850,579	\$ 1,812,769	\$ 10,663,348		
Enhanced Automation Initiative	\$ 617,034	\$ 126,380	\$ 614,728	\$ 125,908	\$ 605,645	\$ 124,048	\$ 1,837,407	\$ 376,336	\$ 2,213,743		
Boiler Energy Efficiency	\$ 1,452,384	\$ 297,476	\$ 2,679,301	\$ 548,773	\$ 4,794,198	\$ 981,944	\$ 8,925,884	\$ 1,828,193	\$ 10,754,077		
Energy Efficiency Partnership for California State-Leased Facilities	\$ 188,340	\$ 38,576	\$ 360,619	\$ 73,862	\$ 425,661	\$ 87,184	\$ 974,620	\$ 199,621	\$ 1,174,241		
Industrial Compressed Air	\$ 1,120,882	\$ 229,578	\$ 1,500,321	\$ 307,295	\$ 1,490,200	\$ 305,222	\$ 4,111,403	\$ 842,095	\$ 4,953,498		
AIM - Compressed Air Efficiency	\$ 1,564,576	\$ 320,455	\$ 1,563,860	\$ 320,309	\$ 1,564,751	\$ 320,491	\$ 4,693,187	\$ 961,255	\$ 5,654,442		
Energy Efficiency Services for Oil Production	\$ 4,419,451	\$ 905,189	\$ 6,147,940	\$ 1,259,217	\$ 6,283,380	\$ 1,286,957	\$ 16,850,770	\$ 3,451,363	\$ 20,302,133		
Refinery Energy Efficiency Program (REEP)	\$ 4,189,745	\$ 858,141	\$ 3,604,489	\$ 738,269	\$ 4,115,183	\$ 842,869	\$ 11,909,417	\$ 2,439,278	\$ 14,348,695		
California Wastewater Process Optimization Program (Cal POP)	\$ 299,491	\$ 61,342	\$ 561,062	\$ 114,916	\$ 1,069,330	\$ 219,019	\$ 1,929,883	\$ 395,277	\$ 2,325,161		
Heavy Industry Energy Efficiency	\$ 6,129,557	\$ 1,255,451	\$ 9,715,823	\$ 1,989,988	\$ 8,523,141	\$ 1,745,703	\$ 24,368,521	\$ 4,991,143	\$ 29,359,664		
VESM Advantage Plus	\$ 501,754	\$ 102,769	\$ 827,366	\$ 169,461	\$ 746,303	\$ 152,857	\$ 2,075,423	\$ 425,087	\$ 2,500,509		
Industrial Refrigeration Performance Plus	\$ 2,034,878	\$ 416,782	\$ 2,027,866	\$ 415,346	\$ 1,427,116	\$ 292,301	\$ 5,489,860	\$ 1,124,429	\$ 6,614,289		
Wine Industry Efficiency Solutions (WEIS)	\$ 679,270	\$ 139,128	\$ 682,655	\$ 139,821	\$ 802,268	\$ 164,320	\$ 2,164,192	\$ 443,268	\$ 2,607,460		
Light Exchange	\$ 717,828	\$ 147,025	\$ 715,787	\$ 146,607	\$ 716,455	\$ 146,744	\$ 2,150,070	\$ 440,376	\$ 2,590,445		
Dairy Energy Efficiency Program	\$ 566,954	\$ 116,123	\$ 433,426	\$ 88,774	\$ 434,297	\$ 88,952	\$ 1,434,676	\$ 293,849	\$ 1,728,526		
Laboratory Airflow and Fume Hood Control Systems	\$ 662,322	\$ 135,656	\$ 662,219	\$ 135,635	\$ 662,777	\$ 135,750	\$ 1,987,318	\$ 407,041	\$ 2,394,359		
Comprehensive Retail Energy Management	\$ 887,112	\$ 181,698	\$ 737,930	\$ 151,142	\$ 633,050	\$ 129,661	\$ 2,258,093	\$ 462,501	\$ 2,720,594		
Medical Building Tune-up (MBTU) Program	\$ 654,001	\$ 133,952	\$ 796,770	\$ 163,194	\$ 1,212,069	\$ 248,255	\$ 2,662,840	\$ 545,401	\$ 3,208,240		
California New Homes Multifamily	\$ 1,472,238	\$ 301,543	\$ 1,457,892	\$ 298,604	\$ 2,879,214	\$ 589,719	\$ 5,809,344	\$ 1,189,866	\$ 6,999,210		
RightLights	\$ 4,832,879	\$ 989,867	\$ 4,830,635	\$ 989,407	\$ 4,833,432	\$ 989,980	\$ 14,496,946	\$ 2,969,254	\$ 17,466,200		
Small Commercial Comprehensive Refrigeration	\$ 1,533,424	\$ 314,075	\$ 1,765,759	\$ 361,661	\$ 1,668,619	\$ 341,765	\$ 4,967,801	\$ 1,017,501	\$ 5,985,302		
Energy Savers	\$ 1,223,175	\$ 250,530	\$ 1,222,566	\$ 250,405	\$ 1,223,205	\$ 250,536	\$ 3,668,946	\$ 751,471	\$ 4,420,417		
Energy Fitness Program	\$ 2,515,880	\$ 515,301	\$ 2,515,463	\$ 515,215	\$ 2,517,667	\$ 515,667	\$ 7,549,011	\$ 1,546,183	\$ 9,095,193		
Enhanced Time Delay Relay	\$ 511,236	\$ 104,711	\$ 701,463	\$ 143,673	\$ 844,775	\$ 173,026	\$ 2,057,474	\$ 421,410	\$ 2,478,884		
Builder Energy Code Training	\$ 430,481	\$ 88,171	\$ 431,160	\$ 88,310	\$ 432,288	\$ 88,541	\$ 1,293,929	\$ 265,022	\$ 1,558,951		
Green Building Technical Support	\$ 489,664	\$ 100,293	\$ 518,912	\$ 106,283	\$ 492,014	\$ 100,774	\$ 1,500,589	\$ 307,350	\$ 1,807,938		
Industrial Recommissioning	\$ 788,283	\$ 161,455	\$ 1,641,544	\$ 336,220	\$ 1,540,130	\$ 315,448	\$ 3,969,956	\$ 813,124	\$ 4,783,080		
Cement Production & Distribution Energy Efficiency (CPD)	\$ 870,700	\$ 178,336	\$ 2,470,558	\$ 506,018	\$ 1,286,242	\$ 263,447	\$ 4,627,499	\$ 947,801	\$ 5,575,300		
Energy Efficient Parking Garage	\$ 643,444	\$ 131,790	\$ 1,060,300	\$ 217,170	\$ 1,072,932	\$ 219,757	\$ 2,776,676	\$ 568,717	\$ 3,345,393		
LED Accelerator	\$ 517,053	\$ 105,902	\$ 1,189,541	\$ 243,641	\$ 1,945,810	\$ 398,539	\$ 3,652,403	\$ 748,083	\$ 4,400,486		
Monitoring-Based Commissioning	\$ 298,947	\$ 61,230	\$ 1,270,832	\$ 260,291	\$ 3,230,984	\$ 661,768	\$ 4,800,763	\$ 983,289	\$ 5,784,052		
Healthcare Energy Efficiency Program	\$ 1,372,128	\$ 281,038	\$ 2,246,748	\$ 460,177	\$ 1,360,406	\$ 278,637	\$ 4,979,282	\$ 1,019,853	\$ 5,999,135		
Furniture Store Energy Efficiency	\$ 1,351,385	\$ 276,790	\$ 1,617,404	\$ 331,276	\$ 1,547,763	\$ 317,012	\$ 4,516,552	\$ 925,077	\$ 5,441,629		
SmartVent for Energy Efficient Kitchens.	\$ 1,403,326	\$ 287,428	\$ 3,105,604	\$ 636,087	\$ 3,026,947	\$ 619,977	\$ 7,535,877	\$ 1,543,493	\$ 9,079,370		
Process Wastewater Treatment Energy Management Program for Agriculture and Food Processing	\$ 559,618	\$ 114,620	\$ 813,226	\$ 166,564	\$ 898,937	\$ 184,120	\$ 2,271,781	\$ 465,305	\$ 2,737,086		
Hospitality Steam Systems	\$ 189,035	\$ 38,718	\$ 704,713	\$ 144,339	\$ 968,040	\$ 198,273	\$ 1,861,788	\$ 381,330	\$ 2,243,118		
Healthcare Gas Efficiency	\$ 289,932	\$ 59,384	\$ 417,228	\$ 85,456	\$ 269,191	\$ 55,136	\$ 976,352	\$ 199,976	\$ 1,176,327		
Energy Star Manufactured Homes	\$ 311,160	\$ 63,732	\$ 615,984	\$ 126,165	\$ 934,995	\$ 191,505	\$ 1,862,139	\$ 381,402	\$ 2,243,541		
Energy Efficiency Program for Entertainment Centers	\$ 788,261	\$ 161,451	\$ 1,009,052	\$ 206,673	\$ 895,125	\$ 183,339	\$ 2,692,438	\$ 551,463	\$ 3,243,901		

TABLE 4.1 - PORTFOLIO BUDGET

SCENARIO 2 - BASE CASE

PG&E Programs	2009 Budget		2010 Budget		2011 Budget		Total 2009-2011 Program Cycle Budget		Total 2009-2011 Program Cycle Budget	Percent of Budget (without EM&V)	Percent of Budget (with EM&V)
	Electric	Gas	Electric	Gas	Electric	Gas	Electric	Gas			
Cool Schools	\$ 829,886	\$ 169,977	\$ 956,062	\$ 195,820	\$ 78,647	\$ 16,108	\$ 1,864,595	\$ 381,905	\$ 2,246,500		
K-12 Private Schools and Colleges Audit and Retrofit	\$ 563,883	\$ 115,494	\$ 685,039	\$ 140,309	\$ 602,744	\$ 123,454	\$ 1,851,666	\$ 379,257	\$ 2,230,923		
Comprehensive Food Processing Audit and Resource Efficiency Program	\$ 1,102,589	\$ 225,832	\$ 1,290,298	\$ 264,278	\$ 2,076,903	\$ 425,390	\$ 4,469,790	\$ 915,499	\$ 5,385,289		
High Performance Office Lighting	\$ 2,546,411	\$ 521,554	\$ 3,968,495	\$ 812,824	\$ 2,332,930	\$ 477,829	\$ 8,847,835	\$ 1,812,207	\$ 10,660,042		
Casino Green	\$ 1,306,682	\$ 267,634	\$ 1,306,527	\$ 267,602	\$ 1,307,734	\$ 267,849	\$ 3,920,942	\$ 803,085	\$ 4,724,027		
Small Commercial Boiler Repair and Tune-up	\$ 109,995	\$ 22,529	\$ 366,611	\$ 75,089	\$ 497,931	\$ 101,986	\$ 974,536	\$ 199,604	\$ 1,174,140		
Dairy Industry Resource Advantage Program	\$ 355,241	\$ 72,760	\$ 643,090	\$ 131,717	\$ 838,070	\$ 171,653	\$ 1,836,400	\$ 376,130	\$ 2,212,531		
Ozone Laundry Energy Efficiency	\$ 518,597	\$ 106,219	\$ 878,472	\$ 179,928	\$ 509,636	\$ 104,383	\$ 1,906,705	\$ 390,530	\$ 2,297,235		
Cool Cash	\$ 443,477	\$ 90,833	\$ 576,759	\$ 118,131	\$ 398,686	\$ 81,659	\$ 1,418,922	\$ 290,623	\$ 1,709,545		
Direct Install for Manufactured and Mobile Homes	\$ 761,900	\$ 156,052	\$ 763,127	\$ 156,303	\$ 763,415	\$ 156,362	\$ 2,288,442	\$ 468,717	\$ 2,757,159		
Third Party Programs Total	\$ 74,702,850	\$ 15,300,584	\$ 96,383,722	\$ 19,741,244	\$ 98,229,868	\$ 20,119,371	\$ 269,316,441	\$ 55,161,199	\$ 324,477,639	18.5%	17.3%
Long-Term Innovation Programs											
Education & Training	\$ 10,893,634	\$ 2,231,226	\$ 13,022,382	\$ 2,667,235	\$ 11,591,780	\$ 2,374,220	\$ 35,507,797	\$ 7,272,681	\$ 42,780,478		
Emerging Technologies	\$ 7,627,773	\$ 1,562,315	\$ 9,629,707	\$ 1,972,350	\$ 10,033,563	\$ 2,055,067	\$ 27,291,043	\$ 5,589,732	\$ 32,880,774		
Innovator Pilot Program	\$ 19,278,482	\$ 3,948,605	\$ 5,685,159	\$ 1,164,430	\$ 5,835,180	\$ 1,195,157	\$ 30,798,821	\$ 6,308,192	\$ 37,107,013		
Zero Net Energy Pilot Program	\$ 16,546,299	\$ 3,389,001	\$ 16,673,709	\$ 3,415,097	\$ 16,818,950	\$ 3,444,845	\$ 50,038,958	\$ 10,248,943	\$ 60,287,902		
Workforce Education & Training	\$ 2,425,752	\$ 496,841	\$ 2,487,904	\$ 509,571	\$ 2,564,451	\$ 525,249	\$ 7,478,107	\$ 1,531,661	\$ 9,009,768		
Residential New Construction	\$ 7,978,414	\$ 1,634,133	\$ 19,874,851	\$ 4,070,753	\$ 38,592,355	\$ 7,904,458	\$ 66,445,620	\$ 13,609,344	\$ 80,054,964		
Total Long-Term Innovation Programs	\$ 64,750,354	\$ 13,262,121	\$ 67,373,712	\$ 13,799,435	\$ 85,436,281	\$ 17,498,997	\$ 217,560,346	\$ 44,560,553	\$ 262,120,899	15.0%	14.0%
Total Programs Budget	\$ 433,932,795	\$ 88,877,801	\$ 476,984,043	\$ 97,695,527	\$ 517,259,247	\$ 105,944,665	\$ 1,428,176,085	\$ 292,517,993	\$ 1,720,694,078	98.3%	91.9%
Statewide Marketing	\$ 7,455,719	\$ 1,527,075	\$ 7,455,719	\$ 1,527,075	\$ 7,455,719	\$ 1,527,075	\$ 22,367,157	\$ 4,581,225	\$ 26,948,382	1.5%	1.4%
PG&E/CPUC EM&V Budget (expense)	\$ 31,531,329	\$ 6,458,224	\$ 31,531,329	\$ 6,458,224	\$ 31,531,329	\$ 6,458,224	\$ 94,593,986	\$ 19,374,672	\$ 113,968,658		6.1%
MDSS Replacement - EM&V (Capital RRQ)	\$ (117,667)	\$ (23,811)	\$ 3,238,155	\$ 655,274	\$ 4,173,579	\$ 844,567	\$ 7,294,067	\$ 1,476,030	\$ 8,770,097		0.5%
MDSS Replacement - Programs (Capital RRQ)	\$ (16,046)	\$ (3,247)	\$ 441,567	\$ 89,356	\$ 569,124	\$ 115,168	\$ 994,645	\$ 201,277	\$ 1,195,922	0.1%	0.1%
Zero Net Energy Lab/Demo Home (Capital RRQ)	\$ -	\$ -	\$ 148,570	\$ 30,065	\$ 856,560	\$ 173,334	\$ 1,005,130	\$ 203,399	\$ 1,208,529	0.1%	0.1%
Total PG&E Portfolio Budget	\$ 472,786,130	\$ 96,836,042	\$ 519,799,383	\$ 106,455,521	\$ 561,845,558	\$ 115,063,033	\$ 1,554,431,070	\$ 318,354,596	\$ 1,872,785,666	100.0%	100.0%

TABLE 4.1 - PORTFOLIO BUDGET

Table 4.2 IOU Portfolio Budget by E3 Formats								
	PROGRAM Category	Core Portfolio - Base Scenario	Percent	Third Party Portfolio - Base Scenario	Percent	Partnership Portfolio - Base Scenario	Percent	Total EE Portfolio - Base Scenario
BUDGET (IOU+Subcontractor)								
A.	Administrative Costs							
A.1	Overhead (G&A Labor/Materials)	\$ 362,646,996	53%	\$ 152,704,643	33%	\$ 58,470,286	56%	\$ 573,821,926
A.1.1	IOU							
A.1.2.	Subcontractor							
A.2	Administrative Costs - Labor (Managerial & Clerical)	\$ -		\$ -		\$ -		
	IOU							
	Subcontractor							
A.3	HR Support/Development							
	IOU							
	Subcontractor							
A.4	Travel, Conference Fees							
	IOU							
	Subcontractor							
B.	Marketing and Outreach	\$ -		\$ -		\$ -		
B.1	Labor							
	IOU							
	Subcontractor (list)							
B.2	Materials							
	IOU							
	Subcontractor (list)							
C.	Direct Implementation (Incentives and Rebates)							
	User Input Incentive	\$ -		\$ -		\$ -		
	End User Rebate	\$ 257,813,789		\$ 146,104,054		\$ 46,033,714		\$ 449,951,557
	Direct Install Labor Activity	\$ 254,000		\$ 68,053,959		\$ -		\$ 68,307,959
	IOU							
	Subcontractor							
	Direct Install Materials & Service	\$ -		\$ 62,100,080		\$ -		\$ 62,100,080
	IOU							
	Subcontractor							
	Upstream/Midstream rebates	\$ 64,200,215		\$ 36,918,783		\$ -		\$ 101,118,998
	Rebate Processing & Inspection	\$ -		\$ -		\$ -		
	Labor							
	IOU							
	Subcontractor							
	Materials							
	IOU							
	Subcontractor							
F.	EM&V Costs	\$ 49,086,000		\$ 30,932,160		\$ 8,360,320		\$ 88,378,480
	IOU							
	Subcontractor							
	Budget	\$ 734,001,000		\$ 496,813,680		\$ 112,864,320		\$ 1,343,679,000
	Costs recovered from other sources	\$ -		\$ -		\$ -		
	Budget (plus other costs)	\$ 734,001,000		\$ 496,813,680		\$ 112,864,320		\$ 1,343,679,000
Basis for table is Ruling (R.01-08-028, dated 2-21-2006) and E-3 calculator I/O								

Table 4.2 - Portfolio Budget by E3 Output

SCENARIO 2 - BASE CASE

Table 5.1 - PG&E EM&V Budget

2009-11 EM&V Budget	\$	122,738,755
CPUC/ED Evaluation and Policy Oversight	\$	74,338,755
Utility Process Evaluation, CALMAC, Strategic Planning and Evaluation Support	\$	39,800,000
MDSS Replacement (Capital RRQ) (1)	\$	8,600,000

(1) PG&E database system - Marketing Decision Support System (MDSS)

SCENARIO 2 - BASE CASE

Table 6.1 - Bill Payer Impacts - Rates by Customer Class				
	Electric Average Rate (Res and Non-Res) \$/kwh	Gas Average Rate (Res and Non-Res) \$/therm	Total Average Bill Savings by Year (\$)	Total Average Lifecycle Bill Savings (\$)
Present Rates - System Average				
2009	\$ 0.13929	\$ 1.16896	\$ 166,050,321	\$ 1,863,996,858
Residential				
Small Commercial				
Large Commercial				
Agricultural				
Other				
2010	\$ 0.13929	\$ 1.16896	\$ 184,315,856	\$ 2,069,036,512
2011	\$ 0.13929	\$ 1.16896	\$ 203,134,893	\$ 2,280,289,489

Notes:

- 1) Average first year electric bill savings is calculated by multiplying an average electric rate with first year kWh energy savings.
- 2) Average first year gas bill savings is calculated by multiplying an average gas rate with first year therm energy savings.
- 3) Total average first year bill savings is the sum of Notes 1 and 2.
- 4) Average lifecycle electric bill savings is calculated by multiplying an average electric rate with lifecycle kWh energy savings.
- 5) Average lifecycle gas bill savings is calculated by multiplying an average gas rate with lifecycle therm energy savings.
- 6) Total average lifecycle bill savings is the sum of Notes 4 and 5.
- 7) As of May 2008, the current bundled average electric rate is \$0.13697 per kwh before the impact of EE programs.
- 8) As of April 2008, the current bundled average gas rate is \$1.15764 per therm before the impact of EE programs.

Table 6.1a - PG&E Bill Payer Impacts Revenues by Customer Class				
	Electric Average Revenues (Res and Non-Res) \$/kwh	Gas Average Revenues (Res and Non-Res) \$/therm	Total Average Annual Bill Savings (\$)	Total Average Lifecycle Bill Savings (\$)
Present Revenues				
2009			\$ 166,050,321	\$ 1,863,996,858
Residential				
Small Commercial				
Large Commercial				
Agricultural				
Other				
2010			\$ 184,315,856	\$ 2,069,036,512
2011			\$ 203,134,893	\$ 2,280,289,489

Table 6.1 a -
Bill Payer Impacts

SCENARIO 2 - BASE CASE

Table 6.1a - PG&E Electric Bill Payer Impacts - Revenues and Rates by Customer Class

Customer Classes	Electric Annual Average Revenues Compared to Present \$000	Electric Annual Average Rate Compared to Present \$/kwh	Total Percentage Change from Present
<u>Bundled</u>			
Residential			
Commercial - Small			
Commercial - Medium			
Commercial - Large			
Streetlights			
Standby			
Agricultural			
Industrial			
<u>Direct Access Service</u>			
Residential			
Commercial - Small			
Commercial - Medium			
Commercial - Large			
Agricultural			
Industrial			

Table 6.1b - PG&E Gas Bill Payer Impacts Revenues by Customer Class

Customer Classes	Gas Average Revenues Compared to Present \$000	Gas Average Rates Compared to Present \$/therm	Total Percentage Change from Present
<u>Core Retail Bundled</u>			
Residential			
Commercial - Small			
Commercial - Large			
<u>Core Retail - Transportation Only</u>			
Residential			
Commercial - Small			
Commercial - Large			
<u>Noncore- Transportation Only</u>			
Industrial - Distribution			
Industrial - Transmission			
Industrial - Backbone			
Electric Generation Distribution and Transmission			
Electric Generation Backbone Wholesale			

Note: Present rates should include bridge funding implemented in rates 1-1-2009; customer classes are IOU-specific ;

SCENARIO 2 - BASE CASE

Table 6.2 - Budget by Funding Source

	2009-2011 Adopted Budget	2009-2011 Revenue Requirement (with FF&U on electric)
2009-2011 Program Cycle Budget	\$ 1,888,631,048	\$ 1,888,631,048
Unspent/Uncommitted Funds	\$ -	\$ -
Total Funding Request for 2009-2011 Program Cycle	\$ 1,888,631,048	\$ 1,888,631,048
Electric Public Goods Charge (PGC) Funds	\$ 353,976,128	\$ 353,976,128
Procurement Energy Efficiency Funds	\$ 1,216,300,324	\$ 1,216,300,324
Gas Public Purpose Program (PPP) Surcharge Funds	\$ 318,354,596	\$ 318,354,596

Funding Source	2009 Budget	Percent of 2009 Funding	2010 Budget	Percent of 2010 Funding	2011 Budget	Percent of 2011 Funding	Total 2009-2011 Program Cycle Budget	Percent of 2009-2011 Funding
Electric Public Goods Charge (PGC) Funds	\$ 117,992,043	19%	\$ 117,992,043	19%	\$ 117,992,043	19%	\$ 353,976,128	19%
Procurement Energy Efficiency Funds	\$ 405,433,441	64%	\$ 405,433,441	64%	\$ 405,433,441	64%	\$ 1,216,300,324	64%
Gas PPP Surcharge Funds	\$ 106,118,199	17%	\$ 106,118,199	17%	\$ 106,118,199	17%	\$ 318,354,596	17%
Total Funds	\$ 629,543,683		\$ 629,543,683		\$ 629,543,683		\$ 1,888,631,048	

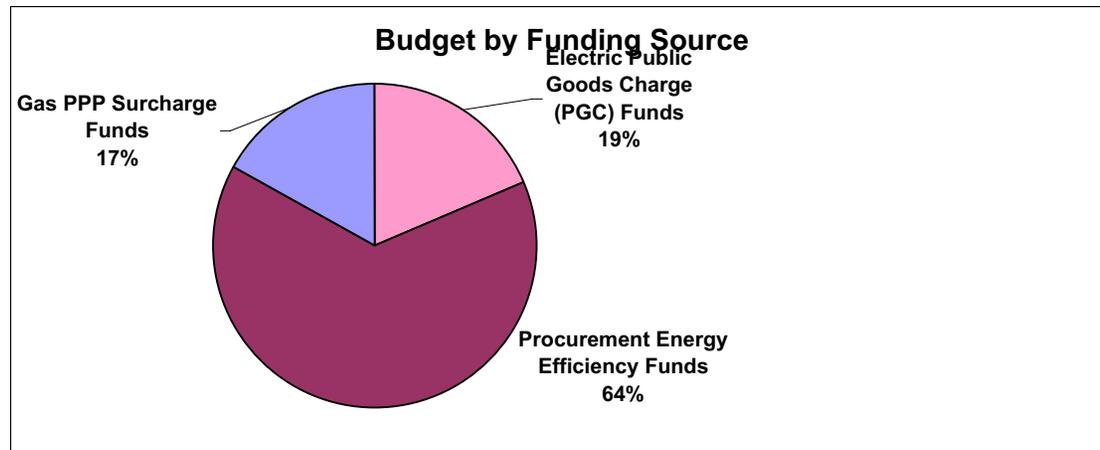


Table 6.2 - Funding Source

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 5-A

Column #	Definition	
<u>1</u>	Estimated Overhead Costs (General & Administration) - IOU	See list of allowable G&A costs identified as Column 1 in the Definitions Tab.
<u>2</u>	Estimated Other Administration Costs - IOU	See list of administrative costs identified for Column 2 in the Definitions Tab
<u>3</u>	Estimated Administrative Costs - IOU Contractors	See list of administrative costs identified for Column 3 in the Definitions tab.
<u>4</u>	Total Administrative Cost (Actual)	Columns 1, 2, & 3 added.
<u>5</u>	Estimated Marketing & Outreach (IOU)	See list of allowable marketing costs identified for Column 5 in the Definitions tab.
<u>6</u>	Estimated Marketing & Outreach (IOU Contractors)	See list of allowable marketing costs identified for Column 6 in the Definitions tab.
<u>7</u>	Total Marketing & Outreach (Actual)	Columns 5 & 6 added.
<u>8</u>	Estimated TOTAL Direct Implementation - Customer Education & Training	See list of allowable direct implementation costs identified for Column 8 in the Definitions tab.
<u>9</u>	Estimated TOTAL Direct Implementation - Workforce, Education, & Training	See list of allowable direct implementation costs identified for Column 9 in the Definitions tab.
<u>10</u>	Estimated Total Direct Implementation (Customer Services)	See list of allowable direct implementation costs identified for Column 10 in the Definitions tab.
<u>11</u>	Estimated Direct Implementation (Incentives & Rebates)	See list of allowable direct implementation costs identified for Column 11 in the Definitions tab.
<u>12</u>	Estimated Direct Implementation (Rebate Processing & Inspection - Labor & Materials)	See list of allowable direct implementation costs identified for Column 12 in the Definitions tab.
<u>13</u>	Estimated Total Direct Implementation (Other)	See list of allowable direct implementation costs identified for Column 13 in the Definitions tab.
<u>14</u>	Total Direct Implementation (Actual)	Columns 8, 9, 10, 11, 12, and 13 added
<u>15</u>	Integration Budget Allocated to other Programs	Add a row with the name of the program / programs aligned to the right in the program name column (Column C) that will receive budgeted dollars for integrated activities from the main program (aligned to the left in Column C). See example provided in the "DSM Integrated Program" section of the PIP tab. Input the dollar amount going to the other program in column 15. This figure will be added to the Main Program Total Budget column (#16).
<u>16</u>	Total Budget By Program (Actual)	Columns 4, 7, 14, and 15 added.
<u>17</u>	Estimated EM&V Costs - IOU	See list of allowable EM&V costs identified for Column 17 in the Definitions tab.
<u>18</u>	Estimated EM&V Costs - IOU Contractors	See list of allowable EM&V costs identified for Column 18 in the Definitions tab.
<u>19</u>	Total EM&V Costs (Actual)	Columns 17 & 18 added.

<u>20</u>	Estimated Integration Budget Coming From Other Programs (Not Added to Program Budget Total)	Add a row with the name of the program / programs that are providing budgeted dollars to the main program for integrated activities. Align the program providing funding to the main program to the right in the program name column (Column C) under the Main Program row. These dollars will not be counted toward the main program's total budget (Column 16).
<u>21</u>	Program Type	Indicate what type of program the row refers to: Core, 3P, or LGP
<u>22</u>	Market Sector	Indicate which market sector the program referred to in the row addresses for the most part: Residential, Commercial, Industrial, or Agricultural.
<u>23</u>	Pilot Program	Indicate if the program is a pilot program by inputting an X.
<u>24</u>	Program Status	Indicate what the program status is: Revision of Existing Program, New Program, or Existing Program.

NOTE: Sub-Programs are defined as a program that has a specific title, targets, budget, and uses a unique delivery or marketing approach not used across the entire program, and for resource programs, has a specific estimated savings and demand impact. The IOUs should identify sub-programs as separate line items and where specifically included in the PIP worksheet address specific program characteristics (see the sections under Codes & Standards, Non-Resource Education & Training, and Emerging Technologies for examples.)

APPENDIX: Allowable Costs

The budget/cost items listed on the Allowable Costs sheet are the only costs that can be claimed for ratepayer funded energy efficiency work. If a utility finds that they or one of their contractors/program implementers have additional costs, the utility will obtain approval for that cost from the CPUC's Energy Division. Energy Division will determine whether that cost fits an existing category or cost item and whether it is an acceptable cost item. Upon ED approval, new cost items will be added to the Allowable Costs sheet and included in an updated reporting workbook. The costs reported should be only for costs actually expended. Any financial commitments are to be categorized as commitments. If the reporting entity does not have a cost as listed on the cost reporting sheet, then no cost is to be reported for that item.

Reported Cost Categories

1/12/2006

Report Parameter	Column #	Allowable Costs
Administrative Cost		Managerial and Clerical Labor
	<u>2</u>	IOU Labor - Clerical
	<u>2</u>	IOU Labor - Program Design
	<u>2</u>	IOU Labor - Program Development
	<u>2</u>	IOU Labor - Program Planning
	<u>2</u>	IOU Labor - Program/Project Management
	<u>2</u>	IOU Labor - Staff Management
	<u>2</u>	IOU Labor - Staff Supervision
	<u>3</u>	Subcontractor Labor - Clerical
	<u>3</u>	Subcontractor Labor - Program Design
	<u>3</u>	Subcontractor Labor - Program Development
	<u>3</u>	Subcontractor Labor - Program Planning
	<u>3</u>	Subcontractor Labor - Program/Project Management
	<u>3</u>	Subcontractor Labor - Staff Management
	<u>3</u>	Subcontractor Labor - Staff Supervision
		Human Resource Support and Development
	<u>2</u>	IOU Labor - Human Resources
	<u>2</u>	IOU Labor - Staff Development and Training
	<u>2</u>	IOU Benefits - Administrative Labor
	<u>2</u>	IOU Benefits - Direct Implementation Labor
	<u>2</u>	IOU Benefits - Marketing/Advertising/Outreach Labor
	<u>2</u>	IOU Payroll Tax - Administrative Labor
	<u>2</u>	IOU Payroll Tax - Administrative Labor
	<u>2</u>	IOU Payroll Tax - Administrative Labor
	<u>2</u>	IOU Pension - Administrative Labor
	<u>2</u>	IOU Pension - Direct Implementation Labor
	<u>2</u>	IOU Pension - Marketing/Advertising/Outreach Labor
	<u>3</u>	Subcontractor Labor- Human Resources
	<u>3</u>	Subcontractor Labor - Staff Development and Training
	<u>3</u>	Subcontractor Benefits - Administrative Labor
	<u>3</u>	Subcontractor Benefits - Direct Implementation Labor
	<u>3</u>	Subcontractor Benefits - Marketing/Advertising/Outreach Labor
	<u>3</u>	Subcontractor Payroll Tax - Administrative Labor
	<u>3</u>	Subcontractor Payroll Tax - Direct Implementation Labor
	<u>3</u>	Subcontractor Payroll Tax - Marketing/Advertising/Outreach Labor
	<u>3</u>	Subcontractor Pension - Administrative Labor
	<u>3</u>	Subcontractor Pension - Direct Implementation Labor

<u>3</u>	Subcontractor Pension - Marketing/Advertising/Outreach Labor
	Travel and Conference Fees
<u>2</u>	IOU Conference Fees
<u>2</u>	IOU Labor - Conference Attendance
<u>2</u>	IOU Travel - Airfare
<u>2</u>	IOU Travel - Lodging
<u>2</u>	IOU Travel - Meals
<u>2</u>	IOU Travel - Mileage
<u>2</u>	IOU Travel - Parking
<u>2</u>	IOU Travel - Per Diem for Misc. Expenses
<u>3</u>	Subcontractor - Conference Fees
<u>3</u>	Subcontractor Labor - Conference Attendance
<u>3</u>	Subcontractor - Travel - Airfare
<u>3</u>	Subcontractor - Travel - Lodging
<u>3</u>	Subcontractor - Travel - Meals
<u>3</u>	Subcontractor - Travel - Mileage
<u>3</u>	Subcontractor - Travel - Parking
<u>3</u>	Subcontractor - Travel - Per Diem for Misc. Expenses
	Overhead (General and Administrative) - Labor and Materials
<u>1</u>	IOU Equipment Communications
<u>1</u>	IOU Equipment Computing
<u>1</u>	IOU Equipment Document Reproduction
<u>1</u>	IOU Equipment General Office
<u>1</u>	IOU Equipment Transportation
<u>1</u>	IOU Food Service
<u>1</u>	IOU Office Supplies
<u>1</u>	IOU Postage
<u>1</u>	IOU Labor - Accounting Support
<u>1</u>	IOU Labor - Accounts Payable
<u>1</u>	IOU Labor - Accounts Receivable
<u>1</u>	IOU Labor - Administrative
<u>1</u>	IOU Labor - Facilities Maintenance
<u>1</u>	IOU Labor - Materials Management
<u>1</u>	IOU Labor - Procurement
<u>1</u>	IOU Labor - Shop Services
<u>1</u>	IOU Labor - Transportation Services
<u>1</u>	IOU Labor - Automated Systems
<u>1</u>	IOU Labor - Communications
<u>1</u>	IOU Labor - Information Technology
<u>1</u>	IOU Labor - Telecommunications
<u>3</u>	Subcontractor Equipment Communications
<u>3</u>	Subcontractor Equipment Computing
<u>3</u>	Subcontractor Equipment Document Reproduction
<u>3</u>	Subcontractor Equipment General Office
<u>3</u>	Subcontractor Equipment Transportation
<u>3</u>	Subcontractor Food Service
<u>3</u>	Subcontractor Office Supplies
<u>3</u>	Subcontractor Postage
<u>3</u>	Subcontractor Labor - Accounting Support
<u>3</u>	Subcontractor Labor - Accounts Payable
<u>3</u>	Subcontractor Labor - Accounts Receivable
<u>3</u>	Subcontractor Labor - Facilities Maintenance

3 Subcontractor Labor - Materials Management
3 Subcontractor Labor - Procurement
3 Subcontractor Labor - Shop Services
3 Subcontractor Labor - Administrative
3 Subcontractor Labor - Transportation Services
3 Subcontractor Labor - Automated Systems
3 Subcontractor Labor - Communications
3 Subcontractor Labor - Information Technology
3 Subcontractor Labor - Telecommunications

Marketing/Advertising/Outreach Costs

5 IOU - Advertisements / Media Promotions
5 IOU - Bill Inserts
5 IOU - Brochures
5 IOU - Door Hangers
5 IOU - Print Advertisements
5 IOU - Radio Spots
5 IOU - Television Spots
5 IOU - Website Development
5 IOU Labor - Marketing
5 IOU Labor - Media Production
5 IOU Labor - Business Outreach
5 IOU Labor - Customer Outreach
5 IOU Labor - Customer Relations
6 Subcontractor - Bill Inserts
6 Subcontractor - Brochures
6 Subcontractor - Door Hangers
6 Subcontractor - Print Advertisements
6 Subcontractor - Radio Spots
6 Subcontractor - Television Spots
6 Subcontractor - Website Development
6 Subcontractor Labor - Marketing
6 Subcontractor Labor - Media Production
6 Subcontractor Labor - Business Outreach
6 Subcontractor Labor - Customer Outreach
6 Subcontractor Labor - Customer Relations

Direct Implementation

11 **Financial Incentives to Customers**

Activity - Direct Labor

8 or 9 as applicable IOU Labor - Curriculum Development
8 IOU Labor - Customer Education and Training
10 IOU Labor - Customer Equipment Testing and Diagnostics
10 IOU Labor - Facilities Audits
10 Subcontractor Labor - Facilities Audits
8 or 9 as applicable Subcontractor Labor - Curriculum Development
8 Subcontractor Labor - Customer Education and Training
10 Subcontractor Labor - Customer Equipment Testing and Diagnostics

Installation and Service - Labor

13 IOU Labor - Customer Equipment Repair and Servicing
13 IOU Labor - Measure Installation
13 Subcontractor Labor - Customer Equipment Repair and Servicing
13 Subcontractor Labor - Customer Equipment Repair and Servicing

Direct Implementation Hardware and Materials

<u>13</u>	IOU Audit Applications and Forms
<u>13</u>	IOU Direct Implementation Literature
<u>13</u>	IOU Education Materials
<u>13</u>	IOU Energy Measurement Tools
<u>13</u>	IOU Installation Hardware
<u>13</u>	Subcontractor - Direct Implementation Literature
<u>13</u>	Subcontractor - Education Materials
<u>13</u>	Subcontractor - Energy Measurement Tools
<u>13</u>	Subcontractor - Installation Hardware
<u>13</u>	Subcontractor -Audit Applications and Forms
	Rebate Processing and Inspection - Labor and Materials
<u>12</u>	IOU Labor - Field Verification
<u>12</u>	IOU Labor - Site Inspections
<u>12</u>	IOU Labor - Rebate Processing
<u>12</u>	IOU Rebate Applications
<u>12</u>	Subcontractor Labor - Field Verification
<u>12</u>	Subcontractor Labor - Rebate Processing
<u>12</u>	Subcontractor - Rebate Applications
	Evaluation, Measurement and Verification
<u>17</u>	IOU Labor - EM&V
<u>17</u>	IOU Materials - EM&V
<u>17</u>	IOU Benefits - EM&V Labor
<u>17</u>	IOU Overhead - EM&V
<u>17</u>	IOU Payroll Tax - EM&V Labor
<u>17</u>	IOU Pension - EM&V Labor
<u>17</u>	IOU Travel - EM&V
<u>18</u>	Subcontractor Labor - EM&V
<u>18</u>	Subcontractor Materials - EM&V
<u>18</u>	Subcontractor Benefits - EM&V Labor
<u>18</u>	Subcontractor Overhead - EM&V
<u>18</u>	Subcontractor Payroll Tax - EM&V Labor
<u>18</u>	Subcontractor Pension - EM&V Labor
<u>18</u>	Subcontractor Travel - EM&V

2009 - 2011 IOU Strategic Planning Program Budget																											
<p><i>Note: Data indicated as "estimated" represent forecasts of budgets. Data indicated as "Actual" represents accurate budget totals.</i></p>																											
Market Sector	Program #	Main Program Name / Sub-Programs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
			Estimated Overhead Costs (General & Administration) IOU	Estimated Other Administration Costs - IOU	Estimated Administrative Costs - IOU Contractors	Total Administrative Cost (Actual)	Estimated Marketing & Outreach (IOU)	Estimated Marketing & Outreach (IOU Contractors)	Total Marketing & Outreach (Actual)	Estimated TOTAL Direct Implementation - Customer Education & Training	Estimated TOTAL Direct Implementation - Workforce, Education, & Training	Estimated Total Direct Implementation (Customer Services)	Estimated Direct Implementation (Incentives & Rebates)	Estimated Direct Implementation (Rebate Processing & Inspection - Labor &)	Estimated Total Direct Implementation (Other)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)	Estimated EM&V Costs - IOU	Estimated EM&V Costs - IOU Contractors	Total EM&V Costs (Actual)	Estimated Integration Budget Coming From Other Programs (Not Added to Program Budget)	Program Type	Market Sector	Pilot Program	Program Status	
Residential Programs	Residential Programs																										
		Core Program #1																									
		Sub-Program #1																									
		Sub-Program #2																									
		Sub-Program #3																									
		Sub-Program #4																									
		Etc.																									
		Core Program #2																									
		Core Program #3																									
		3P Program #1																									
		3P Program #2																									
		3P Program #3																									
	3P Program #4																										
	3P Program #5																										
	3P Program #6																										
Commercial Programs	Commercial Programs																										
		Core Program 1																									
		Core Program 2																									
		Core Program 3																									
		Core Program #4																									
		3Party Program #1																									
		3Party Program #2																									
		3Party Program #3																									
		3Party Program #4																									
		3Party Program #5																									
		3Party Program #6																									
		3Party Program #7																									
	3Party Program #8																										
	3Party Program #9																										
	3Party Program #10																										
	3Party Program #11																										
	3Party Program #12																										
	Commercial New Construction																										
Industrial Programs	Industrial Programs																										
		Core Program #1																									
		Core Program #2																									
		Core Program #3																									
		3P Program #1																									
		3P Program #2																									
Agricultural Programs	Agricultural Programs																										
		Core Program #1																									
		Core Program #2																									
		Core Program #3																									
		3P Program #1																									
		3P Program #2																									
LGP	Local Government Partnership Programs																										
		LGP Program #1																		\$	0.38			LGP	Commercial		
		LGP Program #2																		\$	0.59			LGP	Commercial		
		LGP Program #3																		\$	0.52			LGP	Commercial		
	LGP Program #4																		\$	0.09			LGP	Commercial			
Codes and Standards	Codes and Standards																										
		Codes & Standards Program #1																									
		C&S Program Overall																									
		Locality & CASE Studies: Building Codes																									
		Locality & CASE Studies: Appliance Standards																									
		C&S Compliance Enhancements Training																									
	C&S Coordination (Statewide, EE Programs, External Entities)																										
	Program Education & Training																										
	C&S sub-Program Components																										
	Insurance & Program Evaluation Activities																										
	Other																										
Emerging Technology Programs	Emerging Technologies Program																										
		Emerging Technology Program #1																									
		ET Program Overall																									
		ET Assessment - New Program																									
		ETP Coordination (Statewide, EE Programs, External Entities)																									
		Program Education & Training																									
	ETP sub-Program Components																										
	Insurance & Program Evaluation Activities																										
	Other																										
Workforce	Workforce Education & Training																										
		SCE-CORE-067																									
	Emerging Technologies Program (#)																										
	Program 1																					\$5.00	Core	Cross Cutting			

Market Sector	Program #	Main Program Name / Sub-Programs	Estimated Overhead Costs (General & Administration) - IOU	Estimated Other Administration Costs - IOU	Estimated Administrative Costs - IOU Contractors	Total Administrative Cost (Actual)	Estimated Marketing & Outreach (IOU)	Estimated Marketing & Outreach (IOU Contractors)	Total Marketing & Outreach (Actual)	Estimated TOTAL Direct Implementation - Customer Education & Training	Estimated TOTAL Direct Implementation - Workforce, Education, & Training	Estimated Total Direct Implementation (Customer Services)	Estimated Direct Implementation (Incentives & Rebates)	Estimated Direct Implementation (Rebate Processing & Inspection - Labor &)	Estimated Total Direct Implementation (Other)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)	Estimated EM&V Costs - IOU Contractors	Estimated EM&V Costs (Actual)	Estimated Integration Budget Coming From Other Programs (Not Added to Program Budget)	Program Type	Market Sector	Pilot Program	Program Status
WE&T Programs		Sub-Program Etc.																							
		Program 2																							
		Sub-Program Etc.																							
		Program 3																							
		Sub-Program Etc.																							
	Program 4																								
		TOTAL WE&T Budget																							
DSM Integration Programs		DSM Coordination & Integration																							
		PG&E - Integrated Audit Program																							
		Business Incentive Program (#)																							
		Program 1																\$ 5.00					Core	Cross Cutting	
		Sub-Program Etc.																\$5.00							
	Program 2																								
	Sub-Program Etc.																								
	Program 3																								
		TOTAL DSM Integration Funding:																							
ME&O Programs		Non-Resource Marketing & Outreach																							
		Sub-Program #1																					Core	Cross Cutting	
		Market Research Collateral Delivery																							
		Sub-Program #2																					Core	Cross Cutting	
		Market Research Collateral Delivery																							
	Sub-Program #3																					Core	Cross Cutting		
	Market Research Collateral Delivery																								
LIEE		LIEE																							
		Core Program #1																							
		Core Program #2																							
		Core Program #3																							
		3P Program #1																							
		3P Program #2																							
		3P Program #3																							
	3P Program #4																								
	3P Program #5																								
	3P Program #6																								
HVAC		HVAC																							
		Core Program #1																					Core	Cross Cutting	
		Core Program #2																					Core	Cross Cutting	
		Core Program #3																					Core	Cross Cutting	
		3P Program #1																					3P	Cross Cutting	
		3P Program #2																					3P	Cross Cutting	
		3P Program #3																					3P	Cross Cutting	
	3P Program #4																					3P	Cross Cutting		
	3P Program #5																					3P	Cross Cutting		
	3P Program #6																					3P	Cross Cutting		
		TOTAL:																							

(END OF ATTACHMENT 5-A)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 5-B

Column #	Column Title	Instructions	
<u>1</u>	EE Program Gross kWh Savings	Estimated kWh Program Savings for 2009	2009
<u>2</u>	% of Total Portfolio Savings Goals	Estimated percentage of total portfolio kWh savings goals for 2009 column 1 represents.	
<u>3</u>	Other Program kWh Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>4</u>	EE Program Gross kWh Savings	Estimated kWh Program Savings for 2010	2010
<u>5</u>	% of Total Portfolio Savings Goals	Estimated percentage of total portfolio kWh savings goals for 2010 column 3 represents.	
<u>6</u>	Other Program kWh Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program coordinated with the main EE program. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>7</u>	EE Program Gross kWh Savings	Estimated Program kWh Savings for 2011	2011
<u>8</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio kWh savings goals for 2011 column 7 represents.	
<u>9</u>	Other Program kWh Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>10</u>	Three Year EE Program Gross kWh Savings	Estimated kWh savings associated with the program for the 2009 - 2011 period.	3 Years
<u>11</u>	% of Total Portfolio Savings Goals	Estimated percentage of portfolio kWh savings goals associated with the program for the 2009 - 2011 period.	
<u>12</u>	Three Year Other Program kWh Savings	Total estimated kWh savings for 2009 - 2011 associated with other DSM programs coordinated with the main EE program listed on separate inserted rows for these coordinated programs. These savings estimates are not considered part of the savings associated with the main EE program.	

<u>13</u>	EE Program Gross kW Savings	Estimated kW Program Savings for 2009	2009
<u>14</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio kW savings goals for 2009 column 13 represents.	
<u>15</u>	Other Program kW Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>16</u>	EE Program Gross kW Savings	Estimated kW Program Savings for 2010	2010
<u>17</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio kW savings goals for 2010 column 16 represents.	
<u>18</u>	Other Program MW Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>19</u>	EE Program Gross kW Savings	Estimated kW Program Savings for 2011	2011
<u>20</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio kW savings goals for 2011 column 19 represents.	
<u>21</u>	Other Program kW Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>22</u>	Three Year EE Program Gross kW Savings	Estimated kW savings associated with the program for the 2009 - 2011 period.	3 Years
<u>23</u>	% of Total Portfolio Savings Goals	Estimated percentage of portfolio kW savings goals associated with the program for the 2009 - 2011 period.	
<u>24</u>	Three Year Other Program kW Savings	Total estimated kW savings for 2009 - 2011 associated with other DSM programs coordinated with the main EE program listed on separate inserted rows for these coordinated programs. These savings estimates are not considered part of the savings associated with the main EE program.	

<u>25</u>	EE Program Gross Therm Savings	Estimated therm Program Savings for 2009	2009
<u>26</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio therm savings goals for 2009 column 25 represents.	
<u>27</u>	Other Program Therm Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>28</u>	EE Program Gross Therm Savings	Estimated therm Program Savings for 2010	2010
<u>29</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio therm savings goals for 2010 column 28 represents.	
<u>30</u>	Other Program Therm Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>31</u>	EE Program Gross Therm Savings	Estimated therm Program Savings for 2011	2011
<u>32</u>	% of Total Portfolio Savings Estimate	Estimated percentage of total portfolio therm savings goals for 2011 column 31 represents.	
<u>33</u>	Other Program Therm Savings	For integrated programs add a row to list programs (aligned to the right in the program column) coordinated with the main EE program (aligned to the left in the program column) and indicate the estimated savings contributed by the other program on this separate line. These savings will not be considered as part of the savings associated with the main EE program. (see the section for "DSM Integration" for an example).	
<u>34</u>	Three Year EE Program Gross Therm Savings	Estimated therm savings associated with the program for the 2009 - 2011 period.	3 Years
<u>35</u>	% of Total Portfolio Savings Goals	Estimated percentage of portfolio therm savings goals associated with the program for the 2009 - 2011 period.	
<u>36</u>	Three Year Other Program Therm Savings	Total estimated therm savings for 2009 - 2011 associated with other DSM programs coordinated with the main EE program listed on separate inserted rows for these coordinated programs. These savings estimates are not considered part of the savings associated with the main EE program.	

<u>37</u>	Net TRC Ratio Per Program	Include the Net Total Resource Cost savings ratios associated with the program for the 2009 - 2011 period.
<u>38</u>	Gross TRC Ratio Per Program	Include the gross Total Resource Cost savings ratios associated with the program for the 2009 - 2011 period.
<u>39</u>	Net Program Administrator Cost Ratio	Include the net Program Administrator Cost savings ratios associated with the program for the 2009 - 2011 period.
<u>40</u>	Gross Program Administrator Cost Ratio	Include the gross Program Administrator Cost savings ratios associated with the program for the 2009 - 2011 period.

NOTE: Sub-programs are defined as a program that has a specific title, targets, budget, and uses a unique delivery or marketing approach not used across the entire program, and for resource programs, has a specific estimated savings and demand impact. The IOUs should identify sub-programs as separate lines and where specifically included in the PIP worksheet address specific program characteristics (see the sections under Codes & Standards, Marketing & Outreach, and Emerging Technologies for examples)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 6

Program Implementation Plan General Template

- 1) Program Name and Program ID number. Indicate if the program is a core or third party program (see separate PIP template for partnership programs).
- 2) Projected Program Budget Table

Table 1¹

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Market Sector Programs						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	TOTAL:					

- 3) Projected Program Gross Impacts Table² – by calendar year

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three Year EE Program Gross kWh Savings	2009 - 2011 Three Year EE Program Gross kW Savings	2009 - 2011 Three Year EE Program Gross Therm Savings
Market Sector Programs				
	Core Program #1			
	Sub-Program #1			
	Sub-Program #2			
	Sub-Program #3			
	Sub-Program #4			
	Etc.			
	TOTAL:			

- 4) Program Description³
 - a) Describe program

¹ Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here

Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).

Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.

Total Marketing & Outreach includes all media buy costs and labor associated with marketing production.

Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Total Budget is the sum of all other columns presented here

Definition of Sub-Program: A “sub-program” of a program has a specific title; targets; budget; uses a unique delivery or marketing approach not used across the entire program; and for resource programs, has specific estimated savings and demand impacts.

² For all-electric IOUs, the therm column should include interactive effects.

³ To be provided for overall program (explaining how sub-programs form a coherent plan) and for each sub-program.

- b) List measures (technologies and corresponding incentive levels) to be provided in program and as used to develop the program's measure groupings described in Appendix A. May be included as an appendix to this PIP.
- c) List non-incentive customer services
- 5) Program Rationale and Expected Outcome⁴
- a) Quantitative Baseline and Market Transformation Information: Provide quantitative information describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments as available.

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program #3			

- b) Market Transformation Information
Describe internal annual milestones (estimates) toward market transformation in market sector and segments as available. (e.g. Improve Metric A by 10%, Reduce Metric C by 1000, etc.)

Table 4

Market Sector and Segment	Internal Market Transformation Planning Estimates		
	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

- c) Program Design to Overcome Barriers: Describe *priority* barriers that the program will overcome and how program is designed -- through marketing, delivery mechanisms, incentive levels, or other means -- to overcome these barriers.
- d) Quantitative Program Targets: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete in 2009-11 timeframe. Provide references where available.

Table 5

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			

⁴ To be provided for each program and sub-program in PIP.

Target #3			
Target #4			

[e.g. Target #1: 20,000 refrigerators recycled by 2011; or Partnerships with 5 of the 10 top homebuilders by 2010]

- e) Advancing Strategic Plan goals and objectives: Describe how program aggressively advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan. Reference and describe how program advances *specific 2009-11 near term action steps* toward Strategies outlined in plan.

6) Program Implementation

- a. Statewide IOU Coordination: Describe statewide IOU coordination efforts that will guide program implementation. Describe how the following will be coordinated and unified when available:

- i. Program name
- ii. Program delivery mechanisms
- iii. Incentive levels
- iv. Marketing and outreach plans, e.g. research, target audience, collateral, delivery mechanisms.
- v. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs as applicable
- vi. Similar IOU and POU programs

- b. Program delivery and coordination: Addressing all applicable items on the list below, describe how the program will be delivered or implemented in concert with them, including, if applicable, coordination with other Agency programs or actions. Describe timeline by which market segment/ sub-segment is expected to be “transformed”. Where they exist, highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).

- i. Emerging Technologies program
- ii. Codes and Standards program
- iii. WE&T efforts
- iv. Program-specific marketing and outreach efforts (provide budget)
- v. Non-energy activities of program
- vi. Non-IOU Programs
- vii. CEC work on PIER
- viii. CEC work on codes and standards
- ix. Non-utility market initiatives

Where applicable, include specific references to other sections of the application where there is more detail.

- c. Best Practices: Describe why program approach constitutes “best practice” or reflects “lessons learned” in market strategies, program design and/or implementation techniques. Provide references where available.
- d. Innovation: Describe any unique or innovative aspects of program not previously discussed. Why is this innovative?

- e. Integrated/coordinated Demand Side Management: Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).
 - f. Integration across resource types (energy, water, air quality, etc): If program aims to integrate across resources types, please provide rationale and general approach.
 - g. Pilots: Please describe any pilot projects that are part of this program
 - h. EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Please include, as well, whether there are program-tracking databases that will be needed for evaluation purposes.
- 7) Diagram of Program : Please provide a one page diagram of the program including sub-programs. This should visually illustrate the program/sub-program linkages to areas such as:
- a. Statewide and individual IOU marketing and outreach
 - a. WE&T programs
 - b. Emerging Technologies and Codes and Standards
 - c. Coordinated approaches across IOUs
 - d. Integrated efforts across DSM programs
- 8) Program Logic Model: Provide a program logic model including sub-programs. May include in an appendix to PIP.

(END OF ATTACHMENT 6)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 7

Program Implementation Plan Template for Non Resource Marketing & Outreach Programs

1) Program Name and Program ID number. Indicate if the program is a core or third party program. See separate PIP template for partnership programs.

2) Projected Program Budget Table

Table 1¹

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Non-Resource Marketing & Outreach						
	Sub-Program #1					
	Market Research					
	Collateral					
	Delivery					
	Sub-Program #2					
	Market Research					
	Collateral					
	Delivery					
	Sub-Program #3					
	Market Research					
	Collateral					
	Delivery					
	TOTAL:					

3) Program Description²

- a) Describe program
- b) Statement of Problem and program solutions to overcome the problem
- c) Program goals, strategies and measurable objectives
- d) Target Audience/s
- e) Identify if and how this program will provide any elements of Workforce Education & Training.

4) Program Rationale and Expected Outcome³

¹ Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).

Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.

Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Market Research: e.g. customer segmentation, message pre-tests, behavior, baselines, if available.

Collateral: information produced for customer e.g. brochures, bill inserts, advertisements (TV, radio, print, internet), event displays, etc

Delivery: delivery channels, e.g. direct mail, mass media (print, radio, TV, internet), outdoor, etc

Total Budget is the sum of all other columns presented here

Definition of Sub-program: a “sub-program” of a program has a specific title: targets, budget, unique delivery or marketing approach not used across the entire program, if no sub-program exists, please leave blank.

² To be provided for overall program (explaining how sub-programs form a coherent plan) and for each sub-program

³ To be provided for each program and sub-program in PIP.

- a) If available, Quantitative Baseline and Market Transformation Information: In Table 2, provide quantitative information describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments, as available.

Table 2

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub Program #1			
Sub Program #2			
Sub Program#3			

- b) Market Transformation Information: In Table 3, describe annual milestones (estimates) toward market transformation in market sector and segments as available. (e.g. Improve Metric A by 10%, Reduce Metric C by 1000, etc.)

Table 3

Market Sector and Segment	Market Transformation Planning Estimates		
	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D			

- c) Program Design to Overcome Barriers: Describe *priority* barriers and how the program will overcome and how program is designed -- through marketing, delivery mechanisms, or other means -- to overcome these barriers.
- d) Quantitative Program Targets: Provide quantitative information on number of projects, companies and or target audience(s) that program aims to deliver and/or complete in 2009-11 timeframe. Provide references where available.

Table 4

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

[e.g. Target #1: 20,000 refrigerators recycled by 2011; or Partnerships with 5 of the 10 top homebuilders by 2010]

- e) Advancing Strategic Plan goals and objectives: Describe how program aggressively advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan. Reference and describe how program advances *specific 2009-11 action steps* toward Strategies outlined in plan.

5) Program Implementation

- a) Statewide IOU Coordination: If applicable, describe statewide IOU coordination efforts that will guide program implementation. Describe how the following will be coordinated:
- i. Program name
 - ii. All program delivery mechanisms
 - iii. Marketing materials and message
 - iv. IOU program interactions with CEC, ARB, Air Quality Management Districts, local government programs, other government programs, CBOs, non-governmental organizations, manufacturers, retailers, trade and business associations, as applicable
 - v. Similar IOU and POU programs

- b) Program delivery mechanisms: Addressing the list below, describe how program will be implemented, including coordination of shared budget categories and amounts (admin, EM&V, and other applicable categories). Also list all subcontractors expected to be involved in program delivery.

- i. Funneling of program participants to resource programs
- ii. WE& T
- iii. Coordination with other programs
- iv. Demand-side integration
- v. Non-IOU programs
- vi. Other

Where applicable, include specific references to other sections of the application where there is more detail.

- c) Marketing Plan
- i. market research and/or segmentation
 - ii. Proposed behavior change theories application, if available
 - iii. Proposed target audience/s, if applicable both primary and secondary
 - iv. Message development process, including pre-tests
 - v. Delivery channels, if applicable include public relations and earned media activities
 - vi. Plans for developing message concepts
 - vii. Implementation timeline

- d) Best Practices: Describe why program approach constitutes “best practice” or reflects “lessons learned” in market strategies, program design and/or implementation techniques. Provide references where available.

- e) Innovation: Describe any unique or innovative aspects of program not previously discussed. Why is this innovative?

- f) Integrated/coordinated Demand Side Management: Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).
 - g) Integration across resource types (energy, water, air quality, etc): If program aims to integrate messaging and outreach on other resources, provide rationale and general approach.
 - h) Pilots: Describe any pilot projects/components that are part of this program
 - i) EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Include reference to program tracking databases, including media tracking (reach & frequency) that will be used for evaluation purposes.
- 6) Diagram of Program: Provide a one page diagram of the program including sub-programs. This should visually illustrate the program/sub-program linkages to areas such as:):
- a) Residential
 - b) WE&T programs
 - c) Commercial
 - d) Other programs
 - e) Coordinated approaches across IOUs
 - f) Integrated efforts across DSM programs
- 7) Program Logic Model: Provide a program logic model including sub-programs.

Program Implementation Plan Template for Non-resource Education & Outreach Programs

- 1) Program Name and Program ID number. Indicate if the program is a core or third party program. See separate template for partnership programs.
- 2) Projected Program Budget Table

Table 1⁴

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Non-Resource Marketing & Outreach						
	Sub-Program #1					
	Market Research					
	Collateral					
	Delivery					
	Sub-Program #2					
	Market Research					
	Collateral					
	Delivery					
	Sub-Program #3					
	Market Research					
	Collateral					
	Delivery					
	TOTAL:					

- 3) Program Description
- 4) Program Rationale and Expected Outcome⁵

a) If available, Quantitative Baseline and Market Transformation Information:

Table 2

	Baseline Metric		
	Metric A	Metric B	Metric C

⁴ Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here
Total Administrative Cost includes all Managerial and Clerical Labor, Human Resource Support and Development, Travel and Conference Fees, and General and Administrative Overhead (labor and materials).
Total Direct Implementation – includes all financial incentives used to promote participation in a program and the cost of all direct labor, installation and service labor, hardware and materials, and rebate processing and inspection used to promote participation in a program.
Integrated Budget Allocated to Other Programs includes budget utilized to coordinate with other EE, DR, or DG programs.

Market Research: e.g. customer segmentation, message pre-tests, behavior, baselines, if available.
Collateral: information produced for customer e.g. brochures, bill inserts, advertisements (TV, radio, print, internet), event displays, etc

Delivery: delivery channels, e.g. direct mail, mass media (print, radio, TV, internet), outdoor, etc

Total Budget is the sum of all other columns presented here

Definition of Sub-program: a “sub-program” of a program has a specific title: targets, budget, unique delivery or marketing approach not used across the entire program, if no sub-program exists, please leave blank.

⁵ To be provided for overall program (explaining how sub-programs form a coherent plan) and for each sub-program.

Overall Program			
Sub Program #1			
Sub-Program#2			
Sub-Program#3			

b) Market Transformation Information:

Table 3

Market Sector and Segment	Market Transformation Planning Estimates		
	2009	2010	2011
Metric A			
Metric B			
Metric C			
Metric D.			

c) Market barriers & Program Design to Overcome Barriers:

d) Quantitative Program Targets:

Table 4

Program Name	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

[e.g. Target #1: x# of unique visits to take action web page 2011; or 30 CBO established in 10 diverse communities by 2010]

e) Advancing Strategic Plan goals and objectives:

f) Interagency Actions toward Market Transformation:

5) Program Implementation

a) Statewide IOU Coordination:

b) Program delivery mechanisms:

c) Marketing Plan

d) Best Practices:

e) Innovation:

f) Integrated/coordinated Demand Side Management:

g) Integration across resource types (energy, water, air quality, etc):

h) Pilots:

i) EM&V:

6) Diagram of Program

7) Program Logic Model:

(END OF ATTACHMENT 7)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 8

Codes and Standards Program Implementation Plan Template

1. Program Name and Program ID number. Indicate if the program is a core or third party program. (See separate PIP template for partnership programs).
2. Projected Program Budget Table

Table 1¹

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Codes and Standards						
	Codes & Standards Program #1					
	C&S Program Overall					
	C&S Advocacy & CASE Studies: Building Codes					
	C&S Advocacy & CASE Studies: Appliance Standards					
	C&S Compliance Enhancements Training					
	C&S Coordination (Statewide, EE Programs, External Entities)					
	Program Education & Training					
	C&S sub-Program Components					
	Quality Assurance & Program Evaluation Activities					
	Other					
	TOTAL:					

3. Projected Program Gross Impacts Table – by calendar year

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three Year EE Program Gross kWh Savings	2009 - 2011 Three Year EE Program Gross kW Savings	2009 - 2011 Three Year EE Program Gross Therm Savings
Codes and Standards				
	Codes & Standards Program #1			
	Codes & Standards Program #2			
	Codes & Standards Program #3			
	Codes & Standards Program #4			
	Codes & Standards Program #5			
	Codes & Standards Program #7			
	Codes & Standards Program #8			
	TOTAL:			

4. Program Mission
 - a) Provide a program mission which refers to the basic purpose of the program, its reason for being and the means through which it accomplishes that purpose.

¹ Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here

5. Program Rationale & Expected Outcomes

Provide the program rationale including the following elements if applicable:

- a) Quantitative Baseline: Provide quantitative information describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments.

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Overall Program			
Sub-segment #1			
Sub-segment #2			
Sub-segment #3			

- b) Program Design to Overcome Barriers: Describe barriers and/or market failure(s) that program is trying to address. If barriers vary by market sub-sector, provide this information. Describe *priority* barriers that the program will overcome and how program is designed -- through marketing, delivery mechanisms, or other means -- to overcome these barriers.
- c) Advancing Strategic Plan goals and objectives: Describe how program aggressively advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan. Reference and describe how program advances specific 2009-11 near term action steps toward Strategies outlined in plan.

6. Program Goals, Objectives & Action Strategies

- a) If applicable provide a description for the sub-program components: A Sub-program component is a component of a program that has specific title, budget, targets and uses a unique delivery mechanism/marketing approach not used across the entire program; for resource programs has a specific estimated savings and demand impacts e.g. PG&E SE&T. Describe:
 - b) Program goals which are general statements about the results to be produced by the program
 - c) Program objectives which are more specific milestones to be achieved in order to accomplish the goals
 - d) Program action strategies that will be used to implement the goals

- e) Program outputs which are measurable results of the program linked to the action strategies, for example:
 - 1. Goal 1:
 - Objective 1.1:
 - Action Strategy 1.1.1
 - Outputs (for action strategy 1.1.1):
 - Action Strategy 1.1.2: (Assess the selected technologies according to specific key variables needed to verify the technologies’ performance).
 - Outputs (for action strategy 1.1.2)
- f) Market Transformation Information: Describe the annual milestones (estimates) toward market transformation in market sector and segments. (e.g. Improve Metric A by 10%, Reduce Metric C by 1000, etc.)

Table 3

	Internal Market Transformation Planning Milestones (estimates)		
Market Sector and Segment	2009	2010	2011
Metric A			
Metric B			
Metric C			
Etc.			

- g) Quantitative Program Objectives: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete in 2009-11 timeframe. Provide references where available.

Table 5

	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

7. List of Measures & CASE Studies

- h) Provide a list of measures and Codes and Standards Enhancement (CASE) studies.

8. Coordination & Integration

- i) Describe statewide IOU coordination efforts that will guide program implementation. Addressing the list below, describe how the program will be delivered or implemented including coordination of shared budget

categories and amounts (admin, incentives, EM&V, ME&O, and other applicable categories). Also, list all subcontractors expected to be involved in program delivery. Describe how the following will be coordinated and/or integrated:

- j) C&S Statewide Coordination
- k) C&S Coordination with EE Resource & Non-Resource Programs
- l) C&S Coordination with Crosscutting Programs (ETP, Statewide M&O, WE&T etc.)
- m) C&S Coordination with IDSM
- n) C&S Coordination with External Organizations & Entities

9. Marketing & Outreach/Education & Training

- a. Describe any marketing and outreach and/or education and training elements (such as PG&E SE&T) of the program.

10. Quality Assurance & Evaluation Activities

- b. Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Include reference to tracking databases that will be used for evaluation purposes.

11. Program Theory & Logic Model AND Performance Indicators

- a. Provide the program theory and logic model (if provided in a different section of the filing, reference the section).
- b. Identify a list of performance indicators associated with the program theory and logic model.

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 9

Emerging Technologies Program Implementation Plan Template¹

1. Program Name and Program ID number. Indicate if the program is a core or third party program. (See separate PIP template for partnership programs).
2. Projected Program Budget Table

Table 1²

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Emerging Technologies Program						
	Emerging Technology Program #1					
	ET Program Overall					
	ET Assessment - New Program					
	ETP Coordination (Statewide, EE Programs, External Entities)					
	Program Education & Training					
	ETP sub-Program Components					
	Quality Assurance & Program Evaluation Activities					
	Other					
	TOTAL:					

3. Program Mission
 - a) Provide a program mission which refers to the basic purpose of the program, its reason for being and the means through which it accomplishes that purpose.
4. Program Rationale & Expected Outcomes

Provide the program rationale including the following elements:

 - a) Program Design to Overcome Barriers: Describe barriers and/or market failure(s) that program is trying to address. If barriers vary by market sub-sector, provide this information. Describe priority barriers that the program will overcome and how program is designed -- through marketing, delivery mechanisms, or other means -- to overcome these barriers.
 - b) Advancing Strategic Plan goals and objectives: Describe how program aggressively advances the goals, strategies and objectives of the California Long Term Energy Efficiency Strategic Plan. Reference and describe how

¹ Suggested page limit: ten pages for programs without sub-programs. For programs with two or more sub-programs, provide no more than six additional pages per sub-program.

² Definition of Table 1 Column Headings: Total Budget is the sum of all other columns presented here

program advances specific 2009-11 near term action steps toward Strategies outlined in plan.

5. Program Goals, Objectives & Action Strategies

a) Clearly describe the goals, objectives and action strategies of the program. Use the following as an example:

- i. **ETP Goal 1:** Contribute to EE market transformation efforts by accelerating available emerging technologies into IOU energy efficiency programs.

Objective 1.1: Screen and assess a balanced portfolio of 45 energy efficiency technologies during the period of 2009-11 (i.e. ETP portfolio should include a mix of technologies that address the goals and objectives of CEESP, BBEES and AB32, such as technologies that will contribute to net zero energy new construction technologies for commercial and residential buildings, HVAC for hot-dry climate etc.)

Action Strategy 1.1.1: Select a sufficient number of promising technologies according to specific screening criteria needed to minimize technical and market risk.

Outputs (for action strategy 1.1.1):

- At least an average of 20 technologies per year are screened
- 100% of ET selection forms are completed (ETP short and long forms)
- Market characterization studies should be completed for at least an average of six technologies per year using primary and secondary research (note that a single market characterization study could cover more than one technology)

Action Strategy 1.1.2: Assess the selected technologies according to specific key variables needed to verify the technologies' performance.

Outputs (for action strategy 1.1.2):

- 100% of all technology assessments must have a completed report including all key variables for the assessment
- 100% of all technology assessment must be performed according to best practices including reliable, verifiable sources as well as measurement and analysis techniques.

6. Coordination & Integration

a) Describe statewide IOU coordination efforts that will guide program implementation. Addressing the list below, describe how the program will be delivered or implemented including coordination of shared budget categories and amounts (admin, incentives, EM&V, ME&O, and other

applicable categories). Also, list all subcontractors expected to be involved in program delivery. Describe how the following will be coordinated and/or integrated:

- i. ETP Statewide Coordination
- ii. ETP Coordination with EE Resource & Non-Resource Programs
- iii. ETP Coordination with Crosscutting Programs (C&S, Statewide M&O, WE&T etc.)
- iv. ETP Coordination with IDSM - Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).
- v. ETP Coordination with External Organizations & Entities such as PIER and other research organizations, SMUD etc.

7. Marketing & Outreach/Education & Training

8. Sub-Program Components

- a) A Sub-program component is a component of a program that has a specific title, budget, targets and uses a unique delivery mechanism/marketing approach not used across the entire program; for resource programs has a specific estimated savings and demand impacts e.g. PG&E ZNE Product and Technology Lab.

9. Quality Assurance & Evaluation Activities

- a) Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if already developed. If not developed, indicate the process for developing them. Include reference to tracking databases that will be used for evaluation purposes.

- i. Unique ETP Measure Name
- ii. Quarter update of ETP Evaluation Database
- iii. Electronic compilation of ETP assessment forms
- iv. Mechanism of feedback loop between EE programs and ETP

- v. Track and document performance indicators
- vi. Process evaluation/other evaluations?

10. Program Theory & Logic Model AND Performance Indicators

- a) Provide the program theory and logic model (if provided in a different section of the filing, reference the section).
- b) Identify a list of performance indicators associated with the program theory and logic model.

(END OF ATTACHMENT 9)

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 10

Local Government Program Implementation Plan Template¹

1) Program Name and Program ID number

2) Projected Program Budget Table

Table 1

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Market Sector Program						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	Core Program #2					
	Core Program #3					
	3P Program #1					
	3P Program #2					
	3P Program #3					
	3P Program #4					
	3P Program #5					
	3P Program #6					
	TOTAL:					

3) Projected Program Gross Impacts Table – by calendar year

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three Year EE Program Gross kWh Savings	2009 - 2011 Three Year EE Program Gross kW Savings	2009 - 2011 Three Year EE Program Gross Therm Savings	r Savings Gross TRC Ratio Per Program
Market Sector Programs					
	Core Program #1				
	Sub-Program #1				
	Sub-Program #2				
	Sub-Program #3				
	Sub-Program #4				
	Etc.				
	TOTAL:				

4) Program Element Description and Implementation Plan²

- a) List of program elements: List in numbered format all of the program elements that will be pursued in multiple local partnerships.
- b) Overview: Give an overview of *each program element*.³ List measures (technologies, and where available at filing time corresponding incentive levels) to be provided in that program

¹ This template is for use with all local government (city, county, regional government including LA, San Bernardino and Riverside counties) partnerships. Statewide partnerships (UC/CSU, CCC, CDCR) use the standard template.

² Complete for each direct savings and non-resource program element. General text stating big picture principals is discouraged as is text that repeats from PIP to PIP. If the same approach is used in multiple partnerships, refer to the original text in a master PIP. Include in each subsequent PIP only information on how that element might vary due to climate zone, local dynamics, etc.

element and as used to develop the program's measure groupings described in Appendix A. Identify the percent of measure groups that will likely be used on average in building retrofits (e.g. lighting, HVAC, refrigeration)

- c) Non-incentive services: Describe non-incentive customer services including on-bill financing, audits, technical assistance.
- d) Target audience, etc.: Where appropriate, identify target audience, delivery channels, content of training or materials, etc.
- e) Implementation: Describe how the program will be implemented

5) Program Element Rationale and Expected Outcome⁴

- a) Quantitative Baseline and Market Transformation Information: Provide quantitative and qualitative information as appropriate describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments.⁵

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Program/Element			

- b) Market Transformation Information
Describe internal annual milestones (measurable if possible) toward market transformation in market sector and segments for each resource and non-resource program element, so that it is clear how much partners will accomplish for each resource and non-resource element.⁶

Table 4

	Market Transformation Planning Estimates		
Program /Element	2009	2010	2011
Metric A			
Metric B			
Metric C			
Etc.			

- c) Program Design to Overcome Barriers: Describe *priority* barriers or problems that the program will overcome and how program is designed -- through marketing, delivery mechanisms, incentive levels, or other means -- to overcome these barriers.
- d) Quantitative Program Objectives: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete in 2009-11 timeframe. Provide references where available.

³ A comprehensive description should be provided of each element from #4 through #6 before beginning the next program element description. Place a heading at the top of each element identifying it. Note when savings are credited to another program.

⁴ To be provided for each program element including non-resource elements with no savings goals

⁵ e.g. square-footage or energy use of government facilities that need to be retrofitted; government sector participation in energy efficiency programs; number of small businesses that need direct install; state of code compliance in jurisdiction; change that could occur during cycle if a reach code were implemented, etc.

⁶ e.g. Improve Metric A by 10%, Reduce Metric C by 1000, reach code adopted, implemented, enforced, number of Title 24 codes enforced that have not been, etc.)

Table 1

Program/Element	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

[e.g. Target #1: 20,000 buildings meet Title 24 by 2011; number of rebates given by date; or Partnerships with 5 of the 10 top homebuilders by 2010]

6) Other Program Element Attributes

- a) Best Practices: Describe why program element approach constitutes “best practice” or reflects “lessons learned” in market strategies, program design and/or implementation techniques, or past experience. Provide references where available.
- b) Innovation: Describe any unique or innovative aspects of program element not previously discussed. Why is this innovative?
- c) Interagency Coordination: Describe any interagency coordination with the ARB, CEC on PIER or Codes and Standards; non-utility market initiatives; energy efficiency market forces, opportunities and trends; and timeline by which market segment will be “transformed” or other aspects of the program.⁷
- d) Integrated/coordinated Demand Side Management: Describe how program will achieve integrated or coordinated delivery of all DSM options, as well as LIEE and WET. (If this is an integral part of the program element and fully covered under #4 note that here.) Describe in detail how program will achieve integrated or coordinated delivery of all DSM options (energy efficiency, demand response, and onsite generation) where applicable including integrated program design and delivery, shared budgets, program evaluation, and incentive mechanisms that promote greater integration of DSM resources. Provide a complete description for all the technologies, including integration supporting technologies that will be included in the program. If the program does not include all DSM options as noted above, briefly provide an explanation for a more limited subset of DSM technologies. Utilize Attachment 5A to highlight any shared or leveraged budget categories and amounts (admin, incentives, ME&O, and other applicable categories).
- e) Integration across resource types (energy, water, air quality, etc): If program aims to integrate across resources types, provide rationale and general approach. (If this is an integral part of the program element and fully covered under #4 note that here.)
- f) Pilots: Describe any pilot projects that are part of this program (If this was fully covered under #4, note that here.)
- g) EM&V: Describe any process evaluation or other evaluation efforts that will be undertaken by the utility to determine if the program is meeting its goals and objectives. Include the evaluation timeframe and brief description of scope, as well as a summary of specific methodologies, if

⁷ Could also include coordination with air quality management districts, schools, other local or regional agencies, nonprofit organizations, foundations, etc.

already developed. If not developed, indicate the process for developing them. Include reference to tracking databases that will be used for evaluation purposes.

7) Partnership Program Advancement of Strategic Plan Goals and Objectives

Briefly describe the nature and amount of progress that is expected for each strategic plan element in the Local Government Chapter that was not detailed in #4, and the amount of resources dedicated to fostering this:

Table 6⁸

1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	
1-5: Develop broad education program and peer-to-peer support to local gov'ts to adopt and implement model reach codes	
1-6: Link emission reductions from "reach" codes and programs to ARB's AB 32 program	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings, including:	
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	
3-4: Explore creation of line item in LG budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	

⁸ This table includes a subset of CEESP local government chapter strategies that pertain especially to local government actors. Statewide coordination-related strategies should be discussed in the Strategic Plan portion of the Testimony. This table should be addressed in the master PIP by IOU territory but need not be repeated in local partner PIPs.

3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	

Local Government Program Implementation Plan Template

- 1) Program Name and Program ID number
- 2) Projected Program Budget Table

Table 1

Program #	Main Program Name / Sub-Programs	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
Market Sector Program						
	Core Program #1					
	Sub-Program #1					
	Sub-Program #2					
	Sub-Program #3					
	Sub-Program #4					
	Etc.					
	Core Program #2					
	Core Program #3					
	3P Program #1					
	3P Program #2					
	3P Program #3					
	3P Program #4					
	3P Program #5					
	3P Program #6					
	TOTAL:					

3. Projected Program Gross Impacts Table – by calendar year

Table 2

Program #	Program Name / Sub-Programs	2009 - 2011 Three Year EE Program Gross kWh Savings	2009 - 2011 Three Year EE Program Gross kW Savings	2009 - 2011 Three Year EE Program Gross Therm Savings	Gross TRC Ratio Per Program
Market Sector Programs					
	Core Program #1				
	Sub-Program #1				
	Sub-Program #2				
	Sub-Program #3				
	Sub-Program #4				
	Etc.				
	TOTAL:				

- 4) Program Element Description and Implementation Plan
 - f) List of program elements:
 - g) Overview:
 - h) Non-incentive services:
 - i) Target audience, etc.:
 - j) Implementation:

5) Program Element Rationale and Expected Outcome

e) Quantitative Baseline and Market Transformation Information:

Table 3

	Baseline Metric		
	Metric A	Metric B	Metric C
Program			

f) Market Transformation Information

Table 4

Program	Market Transformation Planning Estimates		
	2009	2010	2011
Metric A			
Metric B			
Metric C			
Etc.			

g) Program Design to Overcome Barriers:

h) Quantitative Program Objectives:

Table 3

Program	Program Target by 2009	Program Target by 2010	Program Target by 2011
Target #1			
Target #2			
Target #3			
Target #4			

6) Other Program Element Attributes

h) Best Practices:

i) Innovation:

j) Interagency Coordination:

k) Integrated/coordinated Demand Side Management:

l) Integration across resource types:

m) Pilots:

n) EM&V:

7) Partnership Program Advancement of Strategic Plan Goals and Objectives

Table 6

1-1: Develop, adopt and implement model building energy codes (and/or other green codes) more stringent than Title 24's requirements, on both a	
---	--

mandatory and voluntary basis; adopt one or two additional tiers of increasing stringency.	
1-2: Establish expedited permitting and entitlement approval processes, fee structures and other incentives for green buildings and other above-code developments.	
1-3: Develop, adopt and implement model point-of-sale and other point-of transactions relying on building ratings.	
1-4: Create assessment districts or other mechanisms so property owners can fund EE through city bonds and pay off on property taxes; develop other EE financing tools.	
1-5: Develop broad education program and peer-to-peer support to local gov't's to adopt and implement model reach codes	
1-6: Link emission reductions from "reach" codes and programs to ARB's AB 32 program	
2-2: Dramatically improve compliance with and enforcement of Title 24 building code, and of HVAC permitting and inspection requirements (including focus on peak load reductions in inland areas).	
2-3: Local inspectors and contractors hired by local governments shall meet the requirements of the energy component of their professional licensing (as such energy components are adopted).	
3-1: Adopt specific goals for efficiency of local government buildings, including:	
3-2: Require commissioning for new buildings, and re-commissioning and retro-commissioning of existing buildings.	
3-4: Explore creation of line item in LG budgets or other options that allow EE cost savings to be returned to the department and/or projects that provided the savings to fund additional efficiency.	
3-5: Develop innovation Incubator that competitively selects initiatives for inclusion in LG pilot projects.	
4-1: LGs commit to clean energy/climate change leadership.	
4-2: Use local governments' general plan energy and other elements to promote energy efficiency, sustainability and climate change.	
4-4: Develop local projects that integrate EE/DSM/water/wastewater end use	
4-5: Develop EE-related "carrots" and "sticks" using local zoning and development authority	

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 11

Attachment

The information provided in this spreadsheet is not factual. For illustrative purposes only.

NOTE: Indicate new programs (those promoted for the first time in 09 - 011 with italics and red font.

Green Collar Sector	Admin.	Class Location	Ed. Level(1)	Collaborators(2)	Class Length(3)	# of Times / yr	Approx Annual Cost (IOU)	Approx Annual Cost (Collaborator)	Continuing Education, or Both(4)	Class Component - Codes & Standards	Class Component - Integration - Existing Bldgs(5)	Class Component - Zero Net Energy(6)	Class Component - Low Income Outreach(7)	Class Component - Emerging Technology(8)	Targeted Market Sector(9)	Program Contact	Phone	E-Mail
HVAC																		
Overview of ACCA Quality Installation Standards	IOU	Stockton EC	Trade / Labor	Ella Baker Center	Full Day	3	\$1,500	\$ -	B	x			x	x	Industrial - C&S	John Smith	415-222-3333	Jsmith@IOU.Com
ACCA Manual D - Duct Design	IOU	Stockton EC	CC	Apollo Alliance	Full Day	2	\$1,000	\$ -	C	x			x		Industrial	John Smith	415-222-3333	Jsmith@IOU.Com
NATE Test Prep / Review	NATE	Stockton EC	CC	Green Lining	Half Day	3	\$1,500	\$ -	E	x			x		Industrial	John Smith	415-222-3333	Jsmith@IOU.Com
The Western Cooling Efficiency Center			Trade / Labor		Evening Lecture	1	\$ 500	\$ 500		x				x	Industrial	John Smith	415-222-3333	Jsmith@IOU.Com
Designers, Architects, & Building Contractors - Existing																		
Green Home Energy Upgrades for Architects & Designers	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Full Day	2	\$1,000	\$ 1,000	C	x	x	x		x	Residential - C&S	John Smith	415-222-3333	Jsmith@IOU.Com
Green Home Energy Upgrades - Level 1	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Three Days	2	\$1,000	\$ 1,000	B	x	x	x		x	Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Green Home Energy Upgrades - Introduction	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Full Day	2	\$1,000	\$ 1,000	E	x	x	x		x	Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Designers, Architects, & Building Contractors - New																		
Advanced Framing for Energy & Resource Efficiency	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Full Day	3	\$1,500	\$ 1,500	E	x			x		Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Best Practices for Reducing Moisture in New Homes	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Full Day	3	\$1,500	\$ 1,500	C	x			x		Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Green / High Efficiency New Homes Workshop	IOU	Stockton EC	Trade / Labor	American Inst. Of Architects	Half Day	3	\$1,500	\$ 1,500	C	x	x	x		x	Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Designers, Architects, & Building Contractors - General (New & Existing Buildings)																		
Daylighting Design Fundamentals	IOU	PEC	Trade / Labor	American Inst. Of Architecture	Half Day	2	\$1,000	\$ 1,000		x				x	All Buildings	John Smith	415-222-3333	Jsmith@IOU.Com
Energy Efficiency Lighting Design	IOU	PEC	Trade / Labor	American Inst. Of Architecture	Half Day	1	\$ 500	\$ 500		x				x	All Buildings	John Smith	415-222-3333	Jsmith@IOU.Com
Building and Energy Managers																		
Cutting Edge Lighting Energy Efficiency for Commercial & Small Business	IOU	Stockton EC	Trade / Labor	BOMA	Half Day	1	\$ 500	\$ 500						x	Commercial - C&S	John Smith	415-222-3333	Jsmith@IOU.Com
eQuest Software Training	IOU	PEC	Trade / Labor	BOMA	Full Day	2	\$1,000	\$ 1,000		x	x			x	Commercial	John Smith	415-222-3333	Jsmith@IOU.Com
Non-HVAC Installers																		
Energy Management Controllers	IOU	PEC	Trade / Labor	Eletrical Union Local 123	Full Day	2	\$1,000	\$ 1,000		x	x			x	All Buildings	John Smith	415-222-3333	Jsmith@IOU.Com
Home Area Networks	IOU	PEC	Trade / Labor	Eletrical Union Local 123	Full Day	1	\$ 500	\$ 500		x	x			x	All Buildings	John Smith	415-222-3333	Jsmith@IOU.Com
Codes & Standards																		
Title 24 Duct Installation Standards & Diagnostic Testing	IOU	Stockton EC	Trade / Labor	California Energy Comm.	Full Day	2	\$1,000	\$ 1,000		x					Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Title 24 HVAC System Change-Outs: Duct Testing Reqs	IOU	Stockton EC	Trade / Labor	California Energy Comm.	Full Day	1	\$ 500	\$ 500							Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Title 24: Where We're Headed with 2008 Standards	IOU	PEC	Trade / Labor	California Energy Comm.	Half Day	1	\$ 500	\$ 500		x					Residential	John Smith	415-222-3333	Jsmith@IOU.Com
Energy & Environment - K-12																		
Green Schools Program	e to Save E	Multiple	K-12	Dept. of Education	annual	1	\$ 500	\$ 500			x				Educational	John Smith	415-222-3333	Jsmith@IOU.Com
Teacher Training Program	e to Save E	Multiple	K-12	Dept. of Education	annual	1	\$ 500	\$ 500			x				Educational	John Smith	415-222-3333	Jsmith@IOU.Com
Careers in Energy Management - College																		
Careers in Energy Management - UC	IOU	UC Berkely	UC	Office of the Chancellor Community	annual	2	\$1,000	\$ 1,000		x	x		x	x	Educational	John Smith	415-222-3333	Jsmith@IOU.Com
Career in Energy Management - CC	IOU	CC of Fresno	CC	College District	annual	2	\$1,000	\$ 1,000		x	x		x	x	Educational	John Smith	415-222-3333	Jsmith@IOU.Com

	Column	Column Header	Definition	Code
1	D	Ed. Level(1)	Education Sector	CSU, UC, K-12, CC (Community College), Trade / Labor (including IOU only courses),
2	E	Collaborators(2)	External Entities Partnering with the IOU to provide resources for training effort (ex: facilities, materials, trainers, outreach)	List Name of Collaborator
3	F	Class Length(3)	Number of days	Half-Day, Full Day, Two Day, Three Day, Annual (if traditional school schedule), etc.
4	J	Continuing Education, Entry Level, or Both(4)	Indicate if the target audience for the class are entry level participants or continuing education or both.	C - Continuing Education, E - Entry Level, Both - B
5	L	Integration - Existing Bldgs(5)	The class incorporates all other demand side technologies (EE, DR, & DG) in a whole building perspective.	X - if applicable
6	M	Zero Net Energy(6)	The class addresses primarily new buildings, incorporating all demand side technologies (EE, DR, & DG) in a whole building perspective.	X - if applicable
7	N	Low Income Outreach(7)	The class is actively promoted to low income participants and a procedure is in place to make it more affordable for these entities to participate.	X - if applicable
8	O	Emerging Technology(8)	the class includes training for emerging technologies	X - if applicable

9	P	Market Sector(8)	Indicate what market sector the course caters to. Use the same market sectors identified in the Strategic Plan. If codes & standards are included in the training indicate by including "C&S" after the market sector identification.	Commercial, Residential, Industrial, Aggricultural
---	---	------------------	---	--

A.08-07-021 et al. DGX/DMG/hkr

ATTACHMENT 12

**Review Of IOU 2009-2011 Energy Efficiency Portfolio Application
Program Implementation Plans (PIPs):**

**Areas of Non-compliance, Additional Information Required, High
Quality PIPs, and Data Requests**

Energy Division

November, 2008

TABLE OF CONTENTS

1	NON-COMPLIANCE ISSUES	5
1.1	Non-Compliance Areas for All IOUs.....	5
1.1.1	Emerging Technologies – all IOUs	5
1.1.2	Codes and Standards- all IOUs.....	8
1.1.3	Non-Residential New Construction- all IOUs.....	9
1.2	Non-Compliant PIPs, Summary Table by IOU	10
1.3	Non-Compliant PIPs – SCE	13
1.3.1	Industrial.....	13
1.3.2	Commercial	13
1.3.3	Residential.....	13
1.3.4	Marketing, Education, and Outreach.....	14
1.3.5	Agriculture	15
1.3.6	Workforce, Education, and Training	15
1.3.7	Integration	16
1.4	Non-Compliant PIPs – PG&E.....	17
1.4.1	Industrial.....	17
1.4.2	Commercial	18
1.4.3	Residential.....	19
1.4.4	HVAC.....	20
1.4.5	Local Government Partnerships	21
1.4.6	Marketing, Education, and Outreach.....	21
1.4.7	Agriculture	21
1.4.8	Workforce, Education, and Training	22
1.4.9	Integration and Zero-Net Energy Programs	23
1.5	Non-Compliance PIPs – SCG.....	24
1.5.1	Industrial and Commercial	24
1.5.2	Residential.....	24
1.5.3	HVAC.....	25
1.5.4	Workforce, Education, and Training	26
1.5.5	Integration	26
1.6	Non-Compliant PIPs – SDG&E	28
1.6.1	Industrial.....	28
1.6.2	Commercial	28
1.6.3	Residential.....	29
1.6.4	HVAC.....	30
1.6.5	Workforce, Education, and Training	30
1.6.6	Integration	31
2	ADDITIONAL INFORMATION REQUIRED.....	32
2.1	Additional Information Required – All IOUs.....	32
2.1.1	Emerging Technologies- all IOUs.....	32
2.1.2	Codes and Standards- all IOUs.....	33
2.1.3	Non-Residential Commercial New Construction- all IOUs	33

2.2	Additional Information Required Summary Table – by IOU.....	34
2.3	Additional Information Required – PG&E	36
2.3.1	Industrial.....	36
2.3.2	Residential.....	37
2.3.3	HVAC.....	38
2.3.4	Local Government Partnerships	39
2.3.5	Marketing, Education, and Outreach.....	41
2.3.6	Integration	41
2.4	Additional Information Required – SDG&E.....	42
2.4.1	Commercial	42
2.4.2	Residential.....	42
2.4.3	HVAC.....	43
2.4.4	Local Government Partnerships	43
2.4.5	Integration	44
2.5	Additional Information Required – SCE	44
2.5.1	Industrial.....	44
2.5.2	Commercial	44
2.5.3	Residential.....	45
2.5.4	HVAC.....	47
2.5.5	Local Government Partnerships	48
2.5.6	Marketing, Education, and Outreach.....	49
2.5.7	Integration	50
2.6	Additional Information Required – SCG.....	50
2.6.1	Industrial.....	50
2.6.2	Commercial	50
2.6.3	Residential.....	51
2.6.4	HVAC.....	51
2.6.5	Local Government Partnerships	51
2.6.6	Integration	51
3	HIGH QUALITY PROGRAM IMPLEMENTATION PLANS (PIP).....	51
3.1	High Quality PIPs – PG&E	51
3.1.1	HVAC.....	51
3.1.2	Integration	51
3.2	High Quality PIPs – SDG&E	51
3.2.1	Commercial	51
3.2.2	Residential.....	52
3.2.3	HVAC.....	52
3.2.4	Integration	52
3.3	High Quality PIPs – SCE.....	52
3.3.1	Residential.....	52
3.3.2	HVAC.....	52
3.3.3	Workforce, Education, and Training	52
3.3.4	Integration	52
3.3.5	Commercial	52
3.4	High Quality PIPs – SCG	52
3.4.1	Integration	52

4	ENERGY DIVISION DATA REQUEST SUMMARY	53
4.1	All IOUs- Summary	53
4.2	All IOUs- Specifics	53
4.3	SCE Commercial sector.....	59
5	APPENDIX 1- ENERGY DIVISION MEMO ON ETP GUIDANCE	62

1 Non-Compliance Issues

1.1 Non-Compliance Areas for All IOUs

1.1.1 Emerging Technologies – all IOUs

To be in compliance with Energy Division direction, all the areas contained in the ED Memo on ETP Guidance (PY 2009-2011 Filing Guidance for IOU Emerging Technology Programs, sent May 28, 2008)¹ that are not currently included in the PIPs must be comprehensively addressed in any future re-filings, including (but not limited to please refer to the guidance memo):

- A revised program theory and logic model and modified/expanded set of performance indicators consistent of 2009-11 program design.
- ETP staff must populate the ETP Evaluation Database each quarter for the period of 2009-11.
- Develop unique ETP measure names. Measure name should describe:
 - Unique ID linking the measure to the internal ETP tracking database
 - Measure code that can be linked to a unique and detailed description of the ETP measure
 - Year of ETP deployment
 - IOU that initiated the assessment
 - Example: ETP_SCE_001_HVAC26_2007

Goals, Objectives and Action Strategies

The following items must be included in the re-filing:

- “Prior to the start of 2009-11 programs, the IOUs will file with the CPUC *specific goals* for the program.”
- “Prior to Prior to the start of 2009-11 programs, the IOUs will file with the CPUC specific deliverables for the above 2009-11 activities.”
- “Prior to the start of 2009-11 programs, the IOUs will file with the CPUC a list of program activities to support future impact and process assessments.”
- “The required data collection, reporting format, and any needed definitions will be filed by the IOUs with the CPUC prior to the start of 2009-11 program.”²
- The ETP lacks a comprehensive statewide mission statement addressing the underlying policy goals and objectives for the ETP. Mission refers to the basic purpose of a program, its reason for being, and the general means through which it accomplishes that purpose. An example of ETP Mission is: “The overall mission of the ETP is to cost-effectively support the policy goals and objectives of the California Energy Efficiency Strategic Plan (CEESP), the Big Bold Energy Efficiency Strategies (BBEES), and AB32.”

¹ See Appendix 1

² Statements taken from July 21st filing.

- The PIP must include ETP goals, objectives and action strategies. Goals are general statement about the results to be produced by the program. Objectives are more specific milestones to be achieved within certain time periods in order to accomplish the goals. Program objectives should meet the S.M.A.R.T. (specific in terms of the results to be achieved, measurable, ambitious but realistic, and time-bound). Action strategies should be aligned with a specific objective and the timely monitoring of the implementation of these actions are intended to provide a balanced perspective on the extent to which progress is made in accomplishing this objective. The revised PIPs must:
 - Identify strategies that clearly address the goals, strategies and implementation plans in the CEESP Research and Technology Chapter.
 - Identify a comprehensive role for ETP within the technology advancement continuum referenced in the SP chapter.
 - Identify strategies and activities that will be used to meet the BBEES.
 - Identify strategic opportunities within other programs to further CEESP.
 - Identify promising technologies through well defined selection criteria.
 - Reduce performance uncertainty and other market barriers through technology assessment and market research.
 - Discuss strategies for information acquisition and dissemination.
 - Describe strategies to cross the chasm and describe ETP role in market transformation.
 - Establish strategies for feed-back loop from EE resource acquisition programs (and other EE programs) to ETP staff to identify reasons for low adoption rates or success (e.g. immature infrastructure such as the absence of training programs, unacceptably high incremental cost, unacceptably low performance).
 - Discuss any necessary improvements in the market infrastructure (e.g. training HVAC installers, training retail sales force).
 - Describe and define each of the following program activities: scanning, screening, assessment, transfer/deployment.

Examples of ETP goals, objectives and action strategies are as follows:

- ETP Goal 1: Contribute to EE market transformation efforts by accelerating available emerging technologies into IOU energy efficiency programs.
 - Objective 1.1: Screen and assess a balanced portfolio of 45 energy efficiency technologies during the period of 2009-11 (i.e. ETP portfolio should include a mix of technologies that address the goals and objectives of CEESP, BBEES and AB32, such as technologies that will contribute to net zero energy new construction technologies for commercial and residential buildings, HVAC for hot-dry climate etc.)
 - Action Strategy 1.1.1: Select a sufficient number of promising technologies according to specific screening criteria needed to minimize technical and market risk.
 - Outputs for Action Strategy 1.1.1:
 - At least an average of 20 technologies per year are screened.

- 100% of ET selection forms are completed (ETP short and long forms).
- Market characterization studies should be completed for at least an average of six technologies per year using primary and secondary research (note that a single market characterization study could cover more than one technology).
- Action Strategy 1.1.2: Assess the selected technologies according to specific key variables needed to verify the technologies' performance.
 - Outputs (for action strategy 1.1.2):
 - 100% of all technology assessments must have a completed report including all key variables for the assessment
 - 100% of all technology assessment must be performed according to best practices including reliable, verifiable sources as well as measurement and analysis techniques.

Quality Assurance and Evaluation Activities

- Track all data necessary to assess statewide ETP coordination.
- Track all data necessary to assess ETP coordination with other EE programs and other external entities.
- Reliably track adoption of ETP measures in EE resource acquisition programs.
- Track all information necessary to conduct both process and impact evaluations based on guidelines set forth in the California Protocols.
- Track key metrics related to important program activities, outputs, and outcomes.
- Establish and update ETP internal tracking and the ETCC databases.
- Provide work-papers in electronic format.
- Describe any plans to conduct a process evaluation of PY 2009-11.

Feedback Loop

ETP must establish a strategy (as directed by ED in the guidance document) for designing a feed-back loop between EE programs to track the adoption rates of technologies originating from ETP (to identify reasons for low adoption rates e.g. immature infrastructure such as the absence of training programs, unacceptably high incremental cost, unacceptably low performance). This general strategy must be discussed in the revised PIP. Regarding implementation, ETP program managers must:

- Identify EE programs that interact or have potential to interact with ETP;
- Establish points of contact, agree upon methods for systematically tracking the adoption of ETP technologies, craft methods for determining reasons for low adoption rates, and establish both how frequently such information will be communicated to ETP and EE program staff;
- Establish a process to document this communications and update it periodically; and
- Embed ET personnel on decision-making teams for certain leading-edge EE programs (e.g., Local Government programs) selected as the best venues for early large-scale deployment of new technology.

Coordination mechanisms

The PIPs must:

- Outline a mechanism for coordination and teaming up with IOUs EE programs and external programs linking strategies back to opportunities with leading edge programs and outside resources.
- Identify the mechanism and strategies that ETP will undertake to team up with PIER and CEC C&S programs on an accelerated trajectory of Building Codes and Standards (Title 24 and Title 20) towards zero net energy buildings by 2020/2030 for residential and commercial sectors, respectively.
- Establish a statewide ETP meeting venue that is open for public input
- Re-filed PIPs must address the following areas:
 - Strategies to coordinate with C&S, WE&T, and IDSM programs
 - Behavior research and decision making
 - Identify success stories and best practices as they apply to ETP

1.1.2 Codes and Standards- all IOUs

Alignment with Strategic Plan

PIPs did not sufficiently outline alignment of C&S program with IOU June 2008 Strategic Plan. Going forward, the PIP must outline alignment with the adopted CEESP:

- Identify strategies and activities that clearly address the goals and strategies in the Codes and Standards Chapter of CEESP
- Identify strategies and activities and activities that will be used to meet the Big Bold Energy Efficiency goals
- Identify strategic opportunities within other programs to further CEESP
- Avoid making generalizations. Describe specific program action strategies that address all the goals and objectives relevant to the C&S programs in the CEESP:
 - Explain how the programs are going to address whole building approaches i.e. what action strategies are going to be used?
 - Explicitly describe how the programs will provide the links between the transformation envisioned for the HVAC industry, code compliance, and behavior/decision making research, including interactions between owners, contractors and code compliance officials?
 - Explain whether the C&S programs provide any incentives in areas like compliance with HVAC standards, whole building design construction and integrated approach?
 - Explain if the C&S programs coordinating with any EE programs and IDSM programs (such as demand response or distributed generation programs) to pursue aggressive implementation of building codes and standards?
 - Describe specific action strategies that the C&S programs will use to engage local governments.
 - Describe the action strategies that the C&S programs will use to develop C&S that are more inclusive of existing buildings.
 - Explicitly describe the CASE studies or other program activities that will be addressing achieving the zero net energy buildings by 2020/2030.
 - Describe the CASE studies or other program activities that will address AB32 goals. Describe how the C&S programs are going to pursue codes and standards

that will achieve the maximum technologically feasible and cost-effective reduction in GHG by January 1, 2011.

- Describe specific action strategies that will enhance California buildings' compliance with buildings Codes and Standards (including the remodel/renovation permit issue).
- Describe specific program action strategies that will address the strategic code compliance goals outlined in the Commercial and HVAC CEESP Chapters.
- Describe which C&S programs will carry out any behavior research studies, if any. Describe which, if any, will be investigating how the Time Dependant Valuation (TDV) methodology will influence users in making decisions.

Coordination and Integration

- Identify action strategies that will be used to coordinate between each IOU's C&S program as well as across EE programs-as C&S is a statewide cross-cutting program.
- Identify action strategies that will be used to coordinate and integrate between C&S programs and EE programs as well as external organizations and entities such as, ETP, IDSM, WE&T, Statewide IOU Marketing and Outreach, New Construction programs, Federal Codes and Standards programs, AB 32, CEC C&S and PIER programs etc.
- Describe specific action strategies that explicitly align C&S program objectives with the accelerated trajectories toward the ZNE BBEEES as proposed by the CEC for Title 24.
- Describe specific action strategies that engage the Local Governments programs.
- Include all C&S activities that have been delegated to third parties

Project Energy Savings

- What is the basis for energy, demand and gas savings i.e. what methodologies are used to come up with the numbers?
- Energy savings gross or net (Note SDG&E and SCG state that energy savings are gross in their PIPs)?

CASE Studies, Compliance Areas, Education & Training & Advocacy

Each C&S PIP should include a list of measures (codes/standards) for each of the following areas:

- CASE studies
- Compliance areas
- Education & Training
- Advocacy (such as with Federal programs)

1.1.3 Non-Residential New Construction- all IOUs

Coordination and Integration

Savings by Design (SBD) is a statewide program.

- For each IOU, describe the statewide coordination activities across all IOUs

- For each IOU, describe coordination activities amongst other EE programs as well as cross-cutting programs such as C&S, ETP, WE&T and Statewide Marketing and Outreach programs
- For each IOU, describe coordination and integration activities across local governments, municipalities, external organizations etc.

Strategic Plan (CEESP)

- Identify strategies and specific actions that clearly address the goals, strategies and implementation plans in the CEESP.
- Identify strategies and specific actions that will be used to meet the Big Bold Energy Efficiency goals.
- Identify strategic opportunities within other programs to further CEESP.
- Avoid making generalizations and describe specific program action strategies that address all the goals and objectives relevant to the Commercial New Construction programs in the CEESP.
- Include proposed process evaluation plans and budgets

1.2 Non-Compliant PIPs, Summary Table by IOU

<u>Southern California Edison</u>	
<i>Industrial</i>	
SCE-22	Industrial Energy Efficiency Program
SCE-16	Industrial Market Sector Plan
<i>Commercial</i>	
ALL	All
<i>Residential</i>	
SCE-Core-012	Online Buyers Guide
SCE-Core-005	Residential Lighting Program for Basic CFLs
SCE-TP-011	Efficiency Affordable Housing Program
SCE-TP-008	Comprehensive Mobile Home Program
<i>Local Government Partnerships</i>	
SCE	ICLEI/ILG/LGC Program
<i>Marketing, Education, and Outreach</i>	
SCE-Core-071	Integrated Marketing and Outreach
SCE-TP-071	Statewide Marketing, Education, and Outreach
<i>Agriculture</i>	
SCE-17	Agriculture and Water Systems Market Sector Plan (#17)
SCE-23	Agriculture Energy Efficiency Program
<i>Workforce, Education, and Training</i>	
SCE-TP-067	WE&T Earth Education and Training
SCE-Core-069	Strategic Planning & Implementation
SCE-Core-068	Synergies
<i>Integration and Zero-Net Energy</i>	

SCE-TP-066	Sustainable Communities Program
SCE-TP-032	Sustainable Portfolio Program
SCE-TP-029	IDSMS for Food Processing
<u>Pacific Gas and Electric</u>	
<i>Industrial</i>	
PG&E-Core-003	PG&E Industrial Core
PG&E-TP-015	Energy Efficiency Services for Oil Production
<i>Commercial</i>	
ALL	All
No PIP #	Savings by Design
<i>Residential</i>	
PG&E-Core-011	Residential New Construction Program
PG&E-TP-046	Energy Star Manufactured Homes
PG&E-TP-027	California New Homes Multi-family
PG&E-Core-008	Mass Market Downstream & Midstream/Upstream
PG&E-TP-057	Direct Install for Manufactured Homes
<i>HVAC</i>	
PG&E-Core-008C	Mass Market Downstream
PG&E-Core-008B	Mass Market Upstream/Midstream
PG&E-Core-017	Emerging Technologies
PG&E-Core-009	Codes and Standards
<i>Local Government Partnerships</i>	
PG&E-Core-019	Innovator Pilots
<i>Marketing, Education, and Outreach</i>	
PG&E-TP-034	Green Building Technical Support Services
<i>Agriculture</i>	
PG&E-Core-001	Agriculture Food Processing and Strategic Implementation Plan
ALL	Third Party Programs
<i>Workforce, Education, and Training</i>	
PG&E-Core-016	Statewide Education & Training (Including Third Party WE&T Programs)
PG&E-Core-020	Long-Term WE&T Strategic Planning
<i>Integration and Zero-Net Energy</i>	
PG&E-Core-012	Integrated Energy Audit Program
PG&E-Core-018	Zero Net Energy Pilot Program
<u>Southern California Gas</u>	
<i>Industrial and Commercial</i>	
SCG-Core-4	Non-Residential Custom Energy Efficiency Core Program (NRCEE)
SCG-Core-3	Non-Residential Standard Energy Efficiency Program (NRSEE)
<i>Residential</i>	
SCG-TP-NA	Comprehensive Manufactured Mobile Home

SCG-Core-3	Multi-Family Energy Efficiency Retrofit Program
SCG-Core-1	Single Family Energy Efficiency Retrofit Program
SCG-TP-NA ³	Multi-Family Home Tune-Up
SCG-TP-NA	Multi-Family Retrofit
SCG-TP-NA	On-Demand Efficiency
SCG-TP-NA	Upstream High Efficiency Water Heater Rebate
<i>Workforce, Education, and Training</i>	
SCG-Core-14	Statewide Education and Training
SCG-TP-NA	Third Party WE&T Programs
SCG-Core-14	Long-Term WE&T Strategic Planning
<i>Integration and Zero-Net Energy</i>	
SCG-Core-9	Strategic Development & Integration
SCG-Core-16	Sustainable Community Case Study
<u>San Diego Gas & Electric</u>	
<i>Industrial</i>	
SDG&E-Core-6	Non-Residential Custom Energy Efficiency Core Program (NRCEE)
SDG&E-Core-5	Non-Residential Standard Energy Efficiency Program (NRSEE)
<i>Commercial</i>	
SDG&E-Core-5	Non-Residential Standard Energy Efficiency Program
SDG&E-Core-6	Non-Residential Custom Energy Efficiency Program
SDG&E-TP-12-O	K-12 Private Schools & Colleges
SDG&E-TP-NA	San Diego Retro-Commissioning Program
SDG&E-TP-12-R	SaveGas Hot Water Control with Continuous Commissioning
SDG&E-TP-12-T	Lodging Energy Efficiency
SDG&E-TP-12-V	Smart Controls on Pools & Spas
SDG&E	Financing
<i>Residential</i>	
SDG&E-Core-3	Multi-Family Rebate Program
SDG&E-TP-NA	Appliance Recycling
SDG&E-TP-NA	Electric Residence Heating
SDG&E-TP-NA	ACTime
SDG&E-TP-NA	20% Cooler
SDG&E-Core-4	Statewide Residential Upstream Lighting
SDG&E-Core-16	Residential New Construction Energy Efficiency
SDG&E-TP-NA	Comprehensive Manufactured Mobile Homes
<i>HVAC</i>	
SDG&E-Core-2	REEP – Core Residential
SDG&E-Core-7	Savings by Design – Commercial New Construction
SDG&E-Core-16	Residential New Construction
SDG&E-TP-L	Electric Resistant Heating

³ PIP numbers not provided.

SDG&E-TP-M	Energy Efficiency for Entertainment Centers
<i>Workforce, Education, and Training</i>	
SDG&E-Core-8	Statewide Education & Training
SDG&E-TP-NA	Third Party WE&T Programs
SDG&E-Core-18	Long-Term WE&T Strategic Planning
<i>Integration and Zero-Net Energy</i>	
SDG&E-Core-13	Strategic Development & Integration
SDG&E-Core-20	Sustainable Community Case Studies

1.3 Non-Compliant PIPs – SCE

1.3.1 Industrial

Industrial Energy Efficiency Program (SCE-22)

Industrial Market Sector Plan (SCE-16 (MSP))

Not enough detail with regard to required elements. Re-filed application must:

- Clearly explain role of subcontractors; state why current program implementers are continuing in this role.
- Clearly indicate how savings will be achieved.
- Clearly indicate how budget will be allocated.
- Identify quantitative baselines for industrial sector sub-segments.
- Describe how lost opportunities will be minimized.
- Discuss how program is coordinated with statewide IOU efforts and other agencies including CEC, PIER, new codes and standards, emerging technologies work.
- Describe implementation of core program by third parties, including sub-programs
- Discuss how industrial strategy advances EE opportunities and trends and market forces.
- Discuss coordinated marketing and outreach plans in industrial sector.

1.3.2 Commercial

All SCE Commercial Sector PIPs

Not enough detail with regard to required elements. Re-filed application must:

- Describe market baselines and penetration targets.
- Describe how lost opportunities will be minimized.
- Describe of how the program fits with non-IOU initiatives, including state agencies like CEC and PIER, and work in codes and standards, emerging technologies.
- Describe why approach constitutes best practice in market strategies, program design and/or implementation techniques.
- Describe coordination with work on integrating demand-side management; workforce education & training.

1.3.3 Residential

Online Buyers Guide (SCE-Core-012)

Not enough detail with regard to required elements. Re-filed application must:

- Provide the market baseline and desired market penetration targets for this program cycle.
- Clearly indicate how this program incorporates the best practices of marketing, education and outreach.
- Describe implementation plan (methodology to direct traffic to site).

Residential Lighting Program for Basic CFLs (SCE-Core-005)

Not enough detail with regard to required elements. Re-filed application must:

- Clearly indicate how this program addresses comprehensiveness and is designed to avoid lost opportunities.
- Describe the way in which this program is supportive of the CEESP. Cite all applicable individual strategies.
- Describe specifically how this program and its targets are supportive of other State efforts with particular attention to AB1109.
- Present coordinated action expected to be taken with other market players as specifically as possible (more specific than “furthering their vision, goals and priorities”).

Efficiency Affordable Housing Program (SCE-TP-011)

Not enough detail with regard to required elements. Re-filed application must:

- Describe coordination with other sectors or market players.
- Clearly identify the coordination/leverage of non-IOU initiatives or trends.
- Clearly describe the source and use of best practices or lessons learned.

Comprehensive Mobile Home Program (SCE-TP-008)

Not enough detail with regard to required elements. Re-filed application must:

- Describe coordination with other IOU or agency statewide efforts.
- Describe coordination with other sectors or market players.
- Clearly identify the coordination/leverage of non-IOU initiatives or trends.

1.3.4 Marketing, Education, and Outreach

Integrated Marketing and Outreach (SCE-Core-071)

Not enough detail with regard to required elements. Re-filed application must:

- Describe how lost opportunities will be minimized and/or how comprehensiveness will be achieved.
- Provide more information on how the program fits with other SCE programs, sectors and/or market players including CBOs.
- Provide information on how this program works with any non-utility initiative, EE opportunities or trends.
- Include a description of the problem that the program addresses, and the solution it provides to the various market segments.
- Include more information on the use of best practices in the area of marketing & outreach, including the use of innovative marketing channels.

- Provide more description on implementation mechanisms including the use of subcontractors.

1.3.5 Agriculture

Agriculture and Water Systems Market Sector Plan (SCE-17 (MSP))

- Combine with Core PIP elements to produce a clear plan for Sector; see below.

Agriculture Energy Efficiency Program (SCE-23)

Not enough detail with regard to required elements. Re-filed application must:

- Provide list of measure groups/measures.
- Provide information regarding:
 - Alignment of MSP with Strategic Plan.
 - Coordination with statewide IOU efforts, other agencies, emerging technologies work.
 - Alignment of program with non-IOU initiatives, market trends
 - How practices constitute best practice.
- Include annual budgets, including administrative and incentive costs.
- Combine with MSP elements to produce one clear Plan for sector.

1.3.6 Workforce, Education, and Training

WE&T Earth Education & Training (SCE-TP-067)

Not enough detail with regard to required elements. Re-filed application must:

- Demonstrate that the programs are WE&T focused and not just limited to a customer ME&O focus by describing specific efforts to work with educational entities to develop well rounded curriculum. This should include a description of the relationship between energy use and GHG pollution, DR, EE, & renewable energy technology impact on GHG, and the challenges of this approach. Describe efforts to provide teacher training and increase the scope of student participation, including students that qualify for low income assistance.
- Describe efforts to minimize lost opportunities by including the full spectrum of technologies within educational activities and not just limit the discussion to EE and DR actions.
- Describe how the program is coordinated with statewide WE&T efforts by specifically indicating how funding will be shared across various WE&T programs, where applicable. Refer to Attachment 11 and 5A for the format to use when submitting this information. Include a diagram that shows how the various programs are linked for implementation of the WE&T program. Show how electric and gas WE&T opportunities will be coordinated between the IOUs where feasible.
- Indicate how best practices will be advanced, including through the development of an EM&V plan, and a plan to use EM&V information to continuously improve WE&T program offerings.
- Include a detailed description of the how the programs will be marketed and promoted among the entities that the IOU will be coordinating with to implement the program.

Workforce Education and Training - Strategic Planning & Implementation (SCE-Core-069)

Not enough detail with regard to required elements:

- To align with adopted strategic plan, remove the description of developing a cost-effectiveness review as one of the overarching strategies. This issue will be addressed in a different venue.
- To support the statewide CEESP with regard to working with outside entities to promote WE&T objectives, include a description of a bi-annual WE&T public workshop designed to obtain stakeholder input at a grass roots level in the section that describes establishing ongoing dialogue with market players.
- Include a more thorough description of the WE&T task force described in the CEESP, including an effort to include participants from non-IOU entities within the educational sector and other relevant sectors.

Workforce Education and Training – Synergies (SCE-Core-068)

- Demonstrate that the programs are WE&T focused and not just limited to a customer ME&O focus by describing specific efforts to work with educational entities to develop well rounded curriculum. Describe efforts to provide teacher training, increase the scope of student participation, including students that qualify for low income assistance.
- Describe efforts to minimize lost opportunities by including the full spectrum of technologies within educational activities and not just limit the discussion to EE and DR actions.
- Describe how the program is coordinated with statewide WE&T efforts by specifically indicating how funding will be shared across various WE&T programs, where applicable. Refer to Attachment 11 for the format to use when submitting this information. Include a diagram that shows how the various programs are linked for implementation of the WE&T program. Show how electric and gas WE&T opportunities will be coordinated between the IOUs where feasible
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve program offerings, will be undertaken.
- Include a detailed description of the how the programs will be marketed and promoted among the entities that the IOU will be coordinating with to implement the program, as well as how the program will be marketed to potential students.
- In order to clearly identify WE&T components of the Synergies Program apart from customer focused marketing, education, & training efforts, categorize the WE&T specific course descriptions separately. Refer to Attachment 11 and 5A for a format to do this.
- Show how electric and gas WE&T opportunities will be coordinated between SCG and SCE, where feasible.

1.3.7 Integration

Sustainable Communities Program (SCE-TP-066)

Sustainable Portfolio Program (SCE-TP-032)

IDSMS for Food Processing (SCE-TP-029)

Not enough detail with regard to required elements. Re-filed application must:

- Explain what type of demand side technologies are included in the program and ensure that all applicable technologies will be promoted with the resulting combination of measures to be determined by the customer. Technologies that are not eligible in the Self-Generation Incentive Program, energy efficiency programs, demand response programs, energy efficiency low-income program, and the California Solar Incentive Program are not eligible for inclusion in integrated programs and if referenced should be removed. In particular, gas fired technologies such as combined heat and power are not eligible as established in these existing programs.

- Describe how integrated programs are designed to develop technologies, measures, and approaches which promote integration broadly, including emerging technologies, infrastructure improvements, and market reforms
- Indicate what the goals and objectives are for the program, indicating quantitative objectives (ex: number of integrated projects completed via program). Include a clear description of whether the program caters to new or existing buildings. If the program caters to both, indicate how the IOU will determine whether and how existing buildings are included in the program.
- Show how the program is coordinated statewide by clearly indicating how funding will be shared across all DSM programs to promote each integrated program including coordinated marketing and outreach plans (see Attachment 5A). Include a diagram that shows how various programs are linked for implementation of the integrated program.
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve program offerings, will be undertaken.
- Describe how evolving knowledge of best practices for integration will be disseminated into relevant academic and workforce training arenas.
- Show how the program is coordinated statewide by discussing what integration supporting administrative changes, actions, and tools will be developed within the IOU to ensure successful implementation of integration programs among the existing yet separate DSM programs.

Show how the program is coordinated statewide by discussing how electric and gas integration opportunities will be coordinated between the IOUs where feasible.

1.4 Non-Compliant PIPs – PG&E

1.4.1 Industrial

PG&E Industrial Core (PG&E-Core-003)

More detail needed on:

- Specific implementation activities.
- Complete list of measures.
- Specific budget information and energy savings information for both industrial and high tech sectors.

- The sustained vision, strategies and coordination that will be undertaken, described separately for the industrial sector and high tech sectors.
- How third party and core industrial programs will be coordinated together and why they constitute a strategic approach.
- The Industrial Strategic Implementation Plan and the Industrial and High Tech Core PIPs failed to provide the information required in February 29, 2008 ACR. Refiling must provide concise information for both market sectors in all required areas, including:
 - Market barriers, quantitative baselines and quantitative market penetration targets within 09-11 period and beyond.
 - Description of and rationale for program implementation approach, including use of sub-contractors and how approach is designed to overcome market barriers in sector sub-segments, as well as how lost opportunities will be minimized.
 - How sector approach coordinates with other IOU programs, state agencies (including PIER and CEC) and work on codes and standard and emerging technologies.
 - How program fits with non-IOU initiatives and market forces.
 - Why the approach constitutes “best practice” in market strategies, program design and/or implementation techniques.
 - Describe the accompanying marketing plan.

Energy Efficiency Services for Oil Production (PG&E-TP-015)

- Provide quantitative information on the number of current customers and market penetration levels to date for this program.
- Justify need for continuing high budget

1.4.2 Commercial

All Programs:

PIPs are uniformly weak in the following areas; more detail needed:

- Describe how lost opportunities will be minimized.
- Include narrative description of how the program fits with the Strategic Plan.
- Describe the current program baseline and how the program will achieve its market penetration objectives.
- Provide baseline consumption and potential savings for subsectors and end-uses, and describe how have sub-sectors been targeted. Provide rationale on how projects or sub-sectors have been prioritized.
- Provide costs and savings estimates for four core commercial buildings programs.
- A clear problem statement is needed, or a description of market barriers that program is designed to overcome.
- Describe how programs will be coordinated on a statewide basis with other IOU programs and agencies, including the CEC, PIER, emerging technologies work and codes and standards.
- Describe how the programs take advantage of other non-IOU programs and market trends.

- Clearly explain of how integrated retrofit programs will be implemented, including coordination with other work areas as needed.

Non-Residential New Construction

- PG&E must have a separate, distinguishable program or approach for Savings By Design (SBD), that is coordinated with the statewide program.
- Since non-residential new construction is a high strategic priority in the Strategic Plan, PG&E must call SBD out in its portfolio with its own budget, coordination, and management instead of spreading it out over five or more market segments.
- Describe the following in the application: how progress will be tracked; how the program will focus on energy use and whole buildings.
- Without such a focus, the implementation approach is spread out and clouded by generalities, for instance (from the application): “Innovative technologies and practices will dramatically grow in use in the coming years through a combination of technology development, financing and incentives, codes and standards and market pull.” (PG&E, p. 35 of 731).
- Projected program budget & program impacts for the PG&E non-residential new construction PIPs are missing and must be provided.

1.4.3 Residential

Residential New Construction Program (PG&E-Core-011)

Not enough detail with regard to required elements. Re-filed application must:

- Provide an assessment of why 06-08 program is not producing estimated savings and how lessons are being incorporated into proposed design.
- Describe current baseline relative to 06-08 program and targets for the 09-11 program. Indicate how many developers and houses were touched in last cycle and how many will be targeted this cycle.
- Describe the specific outreach activities and objectives for the 09-11 period.
- Specifically indicate how this program will achieve the 50% market penetration target. Describe the CEESP target of 10% penetration by at 55% above T24 2005 and how builders who want to go further than Tier 2 can get there.
- Describe coordination activities with PIER and CEC Building Code efforts.
- After determined at the statewide level, describe how incentives are leverage the new NSHP Tier levels.
- Include description of new end-use measures that have been added to the program since 06-08 and also the measures that are no longer included.

Energy Star Manufactured Homes (PG&E-TP-046)

Not enough detail with regard to required elements. Re-filed application must:

- Describe how the program fits within the objectives of the CEESP.
- Describe how lost opportunities will be minimized.
- Explain verbally and visually how this program is integrated with the initiatives of other IOUs and and CEC, PIER, ET.

California New Homes Multi-family (PG&E-TP-027)

Not enough detail with regard to required elements. Re-filed application must:

- Describe how program fits in with CEESP.
- Explain how lost opportunities will be minimized.
- Describe how this program supports ZNE goals.
- Identify how it coordinates with ET programs.

Mass Market Downstream & Midstream/Upstream (PG&E-Core-008)

Not enough detail with regard to required elements. Re-filed application must:

- Clearly describe the overall program logic. Describe all subprograms contained within this large program.
- Include all information present within current program logic models in Appendix C of filing.
- All CEESP strategies contained within Mass Market program (such as HVAC, Plug Loads, Whole House Performance, and Advanced Lighting) require a description of the short and long term plan for specific achievements.

Direct Install for Manufactured Homes (PG&E-TP-057)

Not enough detail with regard to required elements. Re-filed application must:

- Describe baseline and how program will achieve market penetration goals.
- Clearly describe how the program fits within the CEESP.
- Describe how program is coordinated with other initiatives such as PIER, ET, etc.

1.4.4 HVAC

Mass Market Downstream (PG&E-Core-008C)

Not enough detail with regard to required elements. Re-filed application must:

- Identify rebates and incentives for HVAC measure.
- Identify program linkages to other IOUs and Strategic Plan.
- Explain milestones for non-resource elements.
- Address Quality Installation (QI) and Quality Maintenance (QM).
- Identify coordination with or linkages to Quality Installation (QI) and Energy Star branding.
- Logic Model for HVAC is not reflected in Mass Market Downstream 008C – bundling of services (what services?), how market share will be increased (what is the benchmark?), increased customer participation (how accomplished?), no mention under Mass Market of requiring QI with every AC or furnace installed.

Mass Market Upstream/Midstream (PG&E-Core-008B)

Not enough detail with regard to required elements. Re-filed application must:

- Identify rebates and incentives for HVAC measure
- Identify program linkages to other IOUs and Strategic Plan
- Explain milestones for non-resource elements
- Identify product offerings, service packages.
- No HVAC on-board diagnostic incentives offered upstream to manufacturers?

Emerging Technologies (PG&E-Core-017)

- Stronger coordination with HVAC and PIER, RD&D, and Codes and Standards is needed for better implementation.
- Explain how strategies for HVAC implementation can be opportunities to address GHG reductions and relieve constrained grid transmission locations.

Codes and Standards (PG&E-Core-009)

- HVAC permit compliance issues are a significant issue; describe how codes & standards work will be designed to increase the number of HVAC installations to code.
- Many elements present in the CEESP for Codes and Standards are missing and must be described in the refiled application.
- Describe linkages between HVAC and Codes and Standards work in detail.

1.4.5 Local Government Partnerships

Innovator Pilots (PG&E-Core-019)

- Describe how Innovator Pilots will be designed to advance goals and strategies for local governments as included in the adopted Strategic Plan.
- Show how the program will be coordinated with other statewide goals and objectives by describing how program activities that address statewide GHG reduction goals will be coordinated with the objectives of CARB and AB 32 (ex: how a designation of GHG offset funds to local governments would be implemented.)
- Provide detail regarding how available local government funding will be identified along with other state and federal programs that can share in funding these projects. Include a description of how this process will coincide with priority being given to those local governments that are already a part of a local government partnership, including how this will occur and why this is preferable.
- Ensure a process by which best practices and lessons learned from the Innovator Pilot Program will be utilized for future program development and revisions by describing how these findings will be disseminated into the workforce and academic communities..
- Include an explanation for why it is preferable to include CFL recycling programs within the innovator pilot programs. Describe how these programs are considered “innovative” and why is it preferable to include them in the innovator pilot program as opposed to including them in a lighting program or other LGP program?

1.4.6 Marketing, Education, and Outreach

Green Building Technical Support Services (PG&E-TP-034)

- Provide more information pertaining to program interaction/intercept with other PGE programs.

1.4.7 Agriculture

Agriculture Program Implementation Plan and Agriculture (PG&E-Core-001) and Strategy Implementation Plan

Not enough detail with regard to required elements, refiled application must:

- Provide more detailed information about target markets and opportunities, as well as program activities to address these.
- Include annual and 09-11 budget, including administrative and incentive costs.
- Describe program baselines and market penetration objectives.
- Describe lessons learned from previous work and how approach constitutes best practice.
- Combine elements of Strategy Implementation Plan and core agriculture PIP to produce a comprehensive vision for sector, including how core and third party programs complement each other in a strategic fashion, as well as a strategic vision for the core PIP alone.
- Update PIP to describe actions that will be taken to advance the Strategic Plan (SP), including which areas PG&E will take the lead; how SP short term goals will be accomplished by 2011; timeline setting forth milestones.
- Describe integration approach (DSM), providing more specifics.
- Describe plans to advance workforce development in agricultural energy efficiency.
- In combined PIP/strategy plan, explain reasons why wine industry solutions program is deemed successful and lessons learned from this program that will be applied to other programs or agricultural market sub-segments.
- All Third Party program implementation plans failed to provide the required elements with sufficient detail. Third Party programs in re-filed application must provide detail in all specified areas within the updated PIP template.

1.4.8 Workforce, Education, and Training

Statewide Education & Training (Including Third Party Sub-Programs) (PG&E-Core-016)

- Demonstrate that the programs are WE&T focused and not just limited to a customer ME&O focus by describing specific efforts to work with educational entities to develop well rounded curriculum. Describe efforts to provide teacher training, increase the scope of student participation including students that qualify for low income assistance.
- Describe how programs will minimize lost opportunities by including the full spectrum of technologies within educational activities, including EE, DR, DG, and renewable technologies in general.
- Describe how the program is integrated and coordinated with statewide WE&T efforts by specifically indicating how funding will be shared across various WE&T programs where applicable (see Attachment 11 & 5A). Show how electric and gas WE&T opportunities will be coordinated between the IOUs where feasible. Also include a diagram that shows how the various programs are linked for implementation of the WE&T program.
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve WE&T program offerings, will be undertaken.

- Include a detailed description of the how the programs will be marketed and promoted among the entities that the IOU will be coordinating with to implement the program as well as how the program will be marketed to potential students.
- Clearly identify WE&T components of the Statewide Education & Training Program apart from customer focused marketing, education, & training efforts, if necessary, categorize the WE&T specific course descriptions separately.

Long-Term WE&T Strategic Planning (PG&E-Core-020)

- Remove the description of developing a cost-effectiveness review as one of the overarching strategies in order to coincide with the CPUC adopted strategic plan,. This issue will be addressed in a different venue.
- Include a description of a bi-annual WE&T public workshop designed to obtain stakeholder input at a grass roots level in the section that describes establishing ongoing dialogue with market players to support the statewide CAEESP with regard to working with outside entities to promote WE&T objectives.
- Include a more thorough description of the WE&T task force described in the CAEESP including an effort to include participants from non-IOU entities within the educational sector and other relevant sectors.

1.4.9 Integration and Zero-Net Energy Programs

Integrated Energy Audit Program (PG&E Core-012)

Zero Net Energy Pilot Program (PG&E Core-018)

Not enough detail with regard to required elements. Re-filed application must:

- Explain what type of demand side technologies are promoted in the program and ensure that all applicable technologies will be targeted with the resulting combination of measures to be determined by the customer. Technologies that are not eligible in the Self-Generation Incentive Program, energy efficiency programs, demand response programs, energy efficiency low-income program, and the California Solar Incentive Program are not eligible for inclusion in integrated programs and if referenced should be removed. In particular, gas fired technologies such as combined heat and power are not eligible as established in these existing programs.
- Describe how integrated programs are designed to develop technologies, measures, and approaches which promote integration more broadly, including emerging technologies, infrastructure improvements, and market reforms.
- Indicate what the goals and objectives are for the program, indicating quantitative objectives when possible (ex: percentage of audits aimed to result in implemented measures). Include a clear description of whether the program caters to new or existing buildings. If the program caters to both, indicate how the IOU will determine whether and how existing buildings should be included in the program and if there are any distinctions in program approach to new and existing buildings.
- Describe how the program is integrated and coordinated with statewide IOU efforts, and clearly indicate how funding will be shared across all DSM programs to promote each integrated program including coordinated marketing and outreach plans (See Attachment 5A). Also include a diagram that shows how various programs are linked for implementation of the integrated program.

- Develop a process to learn from best practices by discussing the effort that will be undertaken for developing an adequate EM&V plan for program evaluation including a plan to utilize this information to continuously improve integrated program offerings.
- Describe how evolving knowledge of best practices for integrating these programs generate will be disseminated into relevant academic and workforce training arenas.
- Describe how the program is integrated and coordinated with statewide IOU efforts by discussing what integration supporting administrative changes, actions, and tools will be developed within the IOU to ensure successful implementation of integration programs among the existing yet separate DSM programs.

1.5 Non-Compliance PIPs – SCG

1.5.1 Industrial and Commercial

Non-Residential Custom Energy Efficiency Core Program (NRCEE) (SCG-Core-4)

Non-Residential Standard Energy Efficiency Program (NRSEE) (SCG-Core-3)

Not enough detail with regard to required elements. Re-filed application must:

- Clearly explain need for subcontractors
- Clearly indicate how savings will be achieved
- Clearly indicate how budget will be allocated, including between core programs and third party programs, and budgets allocated to process equipment replacement, custom process improvement, grant programs and provide specifics on the proposed Industrial End User Program.
- Include clear problem statement or market barriers that program is designed to overcome.
- Identify quantitative baselines for industrial sector sub-segments, including priority targets and timelines; describe how program will achieve its market penetration targets.
- Describe how lost opportunities will be minimized
- Discuss how program is coordinated with statewide IOU efforts and other agencies, including CEC, PIER, new codes and standards, emerging technologies work
- Discuss how strategies advances non-IOU initiatives, EE opportunities and trends and market forces
- Discuss why approach constitutes best practice
- Clearly explain implementation mechanisms.
- Discuss coordinated marketing and outreach plans in industrial sector
- Discuss plans to integrate approaches across DSM program offerings (DG, DR, EE).
- Please describe how sub-programs in this area will be coordinated and explain any apparent overlap of programs or sub-programs.

1.5.2 Residential

Comprehensive Manufactured Mobile Home (SCG-TP-NA)

Not enough detail with regard to required elements. Re-filed application must:

- Present third party programs as clearly as core programs, specifically:
 - Describe coordination with other IOU or agency statewide efforts.
 - Describe coordination with other sectors or market players.
 - Clearly identify the coordination/leverage of non-IOU initiatives or trends.
 - Disaggregate budget and savings.
 - Clearly describe the source and use of best practices or lessons learned.
 - Describe method used to achieve comprehensiveness and avoid lost opportunities.
 - Explain specifically how this program fits into a coordinated effort to support the CEESP.

Multi-Family Energy Efficiency Retrofit Program (SCG-Core-3)

Program appears to be duplicated by Multifamily Home Tune-Up, Multifamily Retrofit, On Demand Efficiency, and Upstream High Efficiency Water Heater Rebate Program.

Not enough detail with regard to required elements. Re-filed application must:

- Describe clearly how this program supports specific strategies within the CEESP
- Describe how this program leverages other state agency initiatives and market trends
- Describe how this program incorporates support of code compliance

Single Family Energy Efficiency Retrofit Program (SCG-Core-1)

This program is a partnership with SCE who filed a model PIP.

Not enough detail with regard to required elements. Re-filed application must:

- Clearly describe the market baseline and the penetration objectives.
- Discuss how this program supports the CEESP.
- Describe how this program builds on past “lessons learned.”

Multi-Family Home Tune-Up (SCG-TP-NA)

Multi-Family Retrofit (SCG-TP-NA)

On-Demand Efficiency (SCG-TP-NA)

Upstream High Efficiency Water Heater Rebate (SCG-TP-NA)

These programs appear duplicative and able to be consolidated.

Not enough detail with regard to required elements. Re-filed application must:

- Present third party programs as clearly as core programs, specifically:
 - Describe coordination with other IOU or agency statewide efforts.
 - Disaggregate budget and savings.
 - Describe coordination with other sectors or market players.
 - Clearly identify the coordination/leverage of non-IOU initiatives or trends.
 - Clearly describe the source and use of best practices or lessons learned.
 - Describe method used to achieve comprehensiveness and avoid lost opportunities.
 - Explain specifically how this program fits into a coordinated effort to support the CEESP.

1.5.3 HVAC

Please see comments for SDG&E that are also relevant to SCG.

1.5.4 Workforce, Education, and Training

Statewide Education and Training (SCG Core-14)

Third Party WE&T Programs (SCG TP-NA)

- Demonstrate that the programs are WE&T focused and not just limited to a customer ME&O focus by describing specific efforts to work with educational entities to develop well rounded curriculum. Describe efforts to provide teacher training, increase the scope of student participation including students that qualify for low income assistance.
- Minimize lost opportunities by including the full spectrum of technologies within educational activities, where possible including EE, DR, DG, and renewable technologies in general.
- Describe how the program is coordinated statewide by indicating how funding will be shared across various WE&T programs where applicable (See Attachment 11 & 5A). Also include a diagram that shows how the various programs are linked for implementation of the WE&T program. Show how electric and gas WE&T opportunities will be coordinated between SCG and SCE where feasible.
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve WE&T program offerings, will be undertaken.
- Include a detailed description of the how the programs will be marketed and promoted among the entities that the IOU will be coordinating with to implement the program, as well as how the program will be marketed to potential students.
- Clearly identify WE&T components of the Statewide Education & Training Program apart from customer focused marketing, education, & training efforts. If necessary, categorize the WE&T specific course descriptions separately. Refer to the Attachment 11 for the format for submitting this information.

Long-Term WE&T Strategic Planning (SCG- Core-14)

- Remove the description of developing a cost-effectiveness review as one of the overarching strategies in order to coincide with the CPUC adopted strategic plan. This issue will be addressed in a different venue.
- Include a description of a bi-annual WE&T public workshop designed to obtain stakeholder input at a grass roots level in the section that describes establishing ongoing dialogue with market players to support the statewide CAEESP with regard to working with outside entities to promote WE&T objectives,.
- Include a more thorough description of the WE&T task force described in the CAEESP including an effort to include participants from non-IOU entities within the educational sector and other relevant sectors.

1.5.5 Integration

Strategic Development & Integration (SCG-Core-9)

Sustainable Community Case Study (SCG-Core-16)

Not enough detail with regard to required elements. Re-filed application must:

- Explain what type of demand side technologies are promoted in the program and ensure that all applicable technologies will be targeted with the resulting combination of measures to be determined by the customer. Technologies that are not eligible in the Self-Generation Incentive Program, energy efficiency programs, demand response programs, energy efficiency low-income program, and the California Solar Incentive Program are not eligible for inclusion in integrated programs and if referenced should be removed. In particular, gas fired technologies such as combined heat and power are not eligible as established in these existing programs.
- Describe how integrated programs are designed to develop technologies, measures, and approaches which promote integration more broadly, including emerging technologies, infrastructure improvements, and market reforms.
- Indicate what the goals and objectives are for the program, indicating quantitative objectives (ex: # of integrated projects completed as a result of the program). Include a clear description of whether the program caters to new or existing buildings. If the program caters to both, indicate how the IOU will determine whether and how existing buildings should be included in the program and if there are any distinctions in program approach to new and existing buildings.
- Show how the program is coordinated statewide by indicating how funding will be shared, where applicable, across all DSM programs including coordinated marketing and outreach plans, EM&V, etc. (See Attachment 5A). Include a diagram that shows how various programs are linked for implementation of the integrated program. Clearly indicate how the Ranch Plan, Sustainable Community Program, and Savings by Design interact in implementing and funding this program.
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve program offerings, will be undertaken.
- Describe plan to ramp up integrated pilot program actions (ex: providing incentives for integrated projects) within the 09 – 011 period.
- Describe how evolving knowledge of best practices for integration these programs generate will be disseminated into relevant academic and workforce training arenas.
- Show how the program is coordinated statewide by discussing what integration-supporting administrative changes, actions, and tools will be developed within the IOU to ensure successful implementation of integration program among the existing yet separate DSM programs.
- Describe how the program will promote incentive options that encourage higher levels of integration within existing programs. For example, for an integrated audit tool, this discussion would include a focus on the level and detail of information that will be provided to the customer (ex: payback at a package level), linkages to available incentives and how this effects payback.
- Show how the program is integrated and coordinated with statewide IOU efforts by showing how electric and gas integration opportunities will be coordinated between IOUs where feasible.
- Specifically for the Sustainable Community Case Study indicate how this program will interact with the Ranch Plan being developed by the Rancho Mission Viejo Company, what the long term goals are for this program in conjunction the Ranch

Plan, how these long-term goals will be achieved, and how the proposed funding will help achieve them including any additional funding streams within the IOU or elsewhere that will be used to fund the overall Ranch Plan program. Indicate specific incentive mechanisms and goals for this program.

1.6 Non-Compliant PIPs – SDG&E

1.6.1 Industrial

Non-Residential Custom Energy Efficiency Core Program (NRCEE) (SDG&E-Core-6)

Non-Residential Standard Energy Efficiency Program (SDG&E-Core-5)

See also non-compliance issues for these programs in the Commercial sector area.

1.6.2 Commercial

Non-Residential Standard Energy Efficiency Program (SDG&E-Core-5)

- Explain why there are “local” and “statewide” customer size categories, and how and why program features differ between them.
- Provide more detail on how DR, CSI, and/or DG will be integrated.

Non-Residential Custom Energy Efficiency Program (SDG&E-Core-6)

- Explain how/why this program is revised from 2006-08, stronger problem/solution statement, rationale for incentive levels, and explanation of intended ME&O activities.

Financing components of NRSEE and NRCEE (SDG&E-Core-5 and Core-6)

- Provide data on expected market uptake relative to the population of anticipated commercial sector program participants, and the relative roles of financing vs. incentives or other implementation assistance.

K-12 Private Schools & Colleges (SDG&E-TP-12-O)

San Diego Retro-Commissioning Program (SDG&E-TP-NA)

- These two programs have vastly different rationales for incentive design. Please provide analysis or rationale for the merits of each.

SaveGas Hot Water Control with Continuous Commissioning (SDG&E-TP-12-R)

Lodging Energy Efficiency (SDG&E-TP-12-T)

Smart Controls on Pools & Spas (SDG&E-TP-12-V)

- These 3 programs should be better coordinated to offer a comprehensive hotel/motel program offering hot water control and pool pump improvements, along with other traditional lodging retrofits for vending/ice machines, in addition to standard lighting and HVAC measures.

1.6.3 Residential

Multi-Family Rebate Program (SDG&E-Core-3)

Not enough detail with regard to required elements. Re-filed application must:

- Describe method used to achieve comprehensiveness and avoid lost opportunities.
- Explain specifically how this program fits into a coordinated effort to support the CEESP.
- Explain how this program can capitalize on other agency's initiatives, such as code compliance.
- Specifically discuss where this program can leverage other multifamily trends, or market forces.
- Describe how this program's logic model/program design has been influenced by past program evaluations such that it demonstrates best practices or lessons learned.

Appliance Recycling (SDG&E-TP-NA)

Electric Residence Heating (SDG&E-TP-NA)

ACTime (SDG&E-TP-NA)

20% Cooler (SDG&E-TP)

Comprehensive Manufactured Mobile Homes (SDG&E-TP-NA)

Not enough detail with regard to required elements. Re-filed application must:

- Present Third Party programs as clearly as Core programs, specifically:
- Describe coordination with other IOU or agency statewide efforts.
- Describe coordination with other sectors or market players.
- Clearly identify the coordination/leverage of non-IOU initiatives or trends.
- Clearly describe the source and use of best practices or lessons learned.
- Disaggregate budget and savings
- Describe method used to achieve comprehensiveness and avoid lost opportunities
- Explain specifically how this program fits into a coordinated effort to support the CEESP.

Statewide Residential Upstream Lighting (SDG&E-Core-4)

Not enough detail with regard to required elements. Re-filed application must:

- Describe how lost opportunities will be minimized.
- Discuss how this program addresses specific elements of the CEESP
- Provide additional detail of budget breakdown including % incentive for basic CFL, % for advanced tech lighting, % for administrative costs, % for marketing, etc.
- Describe the incorporation of lessons learned and best practices from past cycles.

Residential New Construction Energy Efficiency (SDG&E-Core-16)

Not enough detail with regard to required elements. Re-filed application must:

- Clearly describe the market baseline
- Describe the penetration target and at what % above Title 24
- Describe how is comprehensiveness is assured and lost opportunities are avoided
- Clearly describe the coordination between marketing and program implementation – what are the key links to program participation?

1.6.4 HVAC⁴

REEP – Core Residential (SDG&E-Core-2)

- Describe stronger coordination with HVAC and the CEESP under this program.
- Implement audits for HVAC and QI/QM as part of this program.

Savings by Design (SBD) – Commercial New Construction (SDG&E-Core-7)

- Describe linkages between SBD and the HVAC Strategic Plan.
- Provide comprehensive design aspects including HVAC into SBD.

Residential New Construction (SDG&E-Core-16)

- Provide detailed implementation information and required acknowledgement of HVAC measures.

Electric Resistant Heating – (SDG&E-TP-L)

- Demonstrate that comprehensive audits and/or other HVAC measure evaluations are planned with the installation of this thermostat measure.

Energy Efficiency for Entertainment Centers – (SDG&E-TP-M)

- Include a complete description of the program’s delivery mechanisms.

1.6.5 Workforce, Education, and Training

Statewide Education & Training (SDG&E-Core-8)

Third Party WE&T Programs (SDG&E-TP-NA)

- Demonstrate that the programs are WE&T focused and not just limited to a customer ME&O focus by describing specific efforts to work with educational entities to develop well rounded curriculum. Describe efforts to provide teacher training, increase the scope of student participation including students that qualify for low income assistance.
- Minimize lost opportunities by including the full spectrum of technologies within educational activities, where possible including DG, DR, EE, and renewable technologies in general
- Describe how the program is integrated and coordinated with statewide WE&T efforts by specifically indicating how funding will be shared across various WE&T programs where applicable (See Attachment 11 & 5A). Include a diagram that shows how the various programs are linked for implementation of the WE&T program. Show how electric and gas WE&T opportunities will be coordinated between the IOUs where feasible.
- Describe the process that will be used to develop best practices by discussing how an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve WE&T program offerings, will be undertaken.

⁴ HVAC comments for SDG&E are also relevant to SCG.

- Include a detailed description for how the programs will be marketed and promoted among the entities that the IOU will be coordinating with to implement the program, as well as how the program will be marketed to potential students.
- Identify WE&T components that are part of the Statewide Education & Training Program apart from customer focused marketing, education, & training efforts. If necessary, categorize the WE&T specific course descriptions separately. Include only the WE&T training components when submitting a course inventory. Refer to Attachment 11.

Long-Term WE&T Strategic Planning (SDG&E Core-18)

- Remove the description of developing a cost-effectiveness review as one of the overarching strategies in order to coincide with the CPUC adopted strategic plan. This issue will be addressed in a different venue.
- Include a description of a bi-annual WE&T public workshop designed to obtain stakeholder input at a grass roots level in the section that describes establishing ongoing dialogue with market players to support the statewide CAEESP with regard to working with outside entities to promote WE&T objectives,.
- Include a more thorough description of the WE&T task force described in the CAEESP including an effort to include participants from non-IOU entities within the educational sector and other relevant sectors.

1.6.6 Integration

Strategic Development & Integration (SDG&E-Core-13)

Sustainable Community Case Study (SDG&E- Core-20)

- SDG&E did not adhere to the integration rulings directive (dated April 11, 2008) to include sections specific to 1) cost-effectiveness, 2) attribution of energy savings, 3) funding sources and cost-benefit methodologies, and 4) free-ridership within their stand alone integration chapters, and must revise the integration component of its refiling in order to be compliant.
- Not enough detail with regard to required elements. Re-filed application must:
- Explain what type of demand side technologies are promoted in the program and ensure that all applicable technologies will be targeted with the resulting combination of measures to be determined by the customer. Technologies that are not eligible in the Self-Generation Incentive Program, energy efficiency programs, demand response programs, energy efficiency low-income program, and the California Solar Incentive Program are not eligible for inclusion in integrated programs and if referenced should be removed. In particular, gas fired technologies such as combined heat and power are not eligible as established in these existing programs.
- Describe how integrated programs are designed to develop technologies, measures, and approaches which promote integration more broadly, including emerging technologies, infrastructure improvements, and market reforms.
- Indicate what the goals and objectives are for the program, indicating quantitative objectives (ex: number of integrated projects completed as a result of the program). Include a clear description of whether the program caters to new or existing buildings.

If the program caters to both, indicate how the IOU will determine whether and how existing buildings should be included in the program and if there are any distinctions in program approach to new and existing buildings.

- Show how the program is integrated and coordinated with statewide IOU efforts, by indicating how funding will be shared, where applicable, across all demand side energy programs including coordinated marketing and outreach plans, EM&V, etc. (see Program Implementation Plan budget template). Include a diagram that shows how various programs are linked for implementation of the integrated program. Clearly indicate how the Ranch Plan, Sustainable Community Program, and Savings by Design interact in implementing and funding this program.
- Describe the process to learn from best practices, by describing efforts that will be undertaken for developing an adequate EM&V plan for program evaluation, including a plan to utilize this information to continuously improve integrated program offerings and ramp up integrated pilot program actions (ex: providing combined packages of incentives for integrated projects) within the 09 – 011 period.
- Describe how evolving knowledge of best practices for integration that these programs generate will be disseminated into relevant academic and workforce training arenas.
- Show how the program is coordinated statewide by describing what integration-supporting administrative changes, actions, and tools will be developed within the IOU to ensure successful implementation of integration programs among the existing demand side energy programs.
- Describe how the program will promote incentive options that encourage higher levels of integration within existing programs. For example, for an integrated audit tool, this discussion would include a focus on the level and detail of information that will be provided to the customer (ex: payback at a package level) and linkages to available incentives and how this effects payback, etc.
- Show how the program is coordinated statewide by describing how electric and gas integration opportunities will be coordinated between the IOUs where feasible.
- Specifically for the Sustainable Community Case Study indicate how this program will interact with the Ranch Plan being developed by the Rancho Mission Viejo Company, what the long term goals are for this program in conjunction the Ranch Plan, how these long-term goals will be achieved, and how the proposed funding will help achieve them including any additional funding streams within the IOU or elsewhere that will be used to fund the overall Ranch Plan program. Indicate specific incentive mechanisms and goals for this program.

2 Additional Information Required

2.1 Additional Information Required – All IOUs

2.1.1 Emerging Technologies- all IOUs

Budget and Resources Allocation

- Clarify how the budget and resources (labor/non-labor) will be allocated across the different activities with each ETP, such as administration, implementation.

- Describe the resources allocated to address the Strategic Plan goals (new components/areas/potential technology areas), statewide coordination, marketing/outreach/information transfer, program implementation (identify new projects vs. carry over from previous cycles) etc.

2.1.2 Codes and Standards- all IOUs

Budget and Resources Allocation

The PIP should identify budget and resources (number of staff-internal/external) allocation:

- Administrative
- CASE studies
- Compliance enhancement
- Advocacy
- Marketing and outreach
- Evaluation studies (market baseline, market share and adoption), SP support, (SE&T for PG&E)
- Coordination with local governments, education and training, IDSM, (any incentives)
- Third party projects' budgets
- Marketing and outreach activities

2.1.3 Non-Residential Commercial New Construction- all IOUs

Incentives and Budget Allocation

Outline the following in a table format for each Commercial New Construction PIP:

- Describe the incentives.
- State the projected budget amount allocated for each incentive, for each year and for the total PY (2009-11).
- State the projected budget amount allocated for program administration, for each year and for the total PY (2009-11).
- State the projected budget allocated for third party activities.
- State the projected budget associated with each program activity, e.g. non-energy activities (marketing and outreach, education and training), sub-contractors activities, marketing activities, Sustainable Communities and Case Studies, non-energy activities, coordination with USGBC and other initiatives, Commissioning, behavioral strategies, Green Energy Systems (SGC).

EM&V Issues

- Identify how the savings will be calculated and measured for *design assistance* (what is the baseline).
- Describe how the energy effects resulting from commissioning will be calculated and measured/verified.⁵

⁵ Although on-going commissioning is one more argument for whole building programs that target continually reduced consumption instead of savings, commissioning is notoriously hard to measure energy effects for – some measures actually increase energy

- Provide a definition of "persistence." Is persistence described as the effects of commissioning, persistence of the measures, or persistence of incremental savings over the persistence of regular NRNC savings?

2.2 Additional Information Required Summary Table – by IOU

<u>Pacific Gas & Electric</u>	
<i>Industrial</i>	
PG&E Core – 003	Industrial Core Program
PG&E-TP	All Third Party Programs
<i>Residential</i>	
PG&E TP-027	California New Homes Multi-family
PG&E Core-008	Mass Market Downstream & Midstream/Upstream
PG&E TP-057	Direct Install for Manufactured Homes
PG&E-Core-018	Zero Net Energy Pilots
PG&E Core-010	Low Income EE Program
PG&E Core-012	Integrated Audits
<i>HVAC</i>	
PG&E Core 008C	Mass Market Downstream
PG&E Core 008B	Mass Market Upstream
PG&E Core 017	Emerging Technologies
PG&E TP 030	Energy Savers – Sm. Business
PG&E TP 041	Furniture Store EE
PG&E TP 056	Cool Cash
PG&E TP 032	Direct Install Mfg. & Mobile Homes
<i>Local Government Partnerships</i>	
PG&E-GP-001 to PG&E-GP-018	Local Government Partnerships
PG&E-Core-19	Innovator Pilot
PG&E-GP-20	Green Communities
<i>Marketing, Education, and Outreach</i>	
P&GE-Core-016	Education & Training
<i>Integration</i>	
PG&E Core-012 and 018	Integrated Energy Audit Program / Zero Net Energy Pilot Program
<u>San Diego Gas & Electric</u>	
<i>Commercial</i>	
SDG&E	All Programs

use. With built-in M&V to track consumption over time, evaluators would have a good tool for verifying persistence.

SDG&E 12-O	K-12 Private Schools & Colleges
SDG&E 12-R	SaveGas Hot Water Control with Continuous Commissioning
SDG&E 12-S	Healthcare EE
<i>Residential</i>	
SDG&E Core-2	Residential Energy Efficiency Program
<i>HVAC</i>	
SDG&E	Multiple
<i>Integration</i>	
SDG&E Core-13	Strategic Development & Integration
SDG&E Core-20	Sustainable Community Case Study
SDG&E Core-4	Statewide Residential Upstream Lighting
SDG&E Core-16	Residential New Construction Energy Efficiency
SDG&E Core-20	Sustainable Communities
<u>Southern California Edison</u>	
<i>Industrial</i>	
SCE -22	Industrial EE Program
<i>Commercial</i>	
SCE	All Third Party Programs
<i>Residential</i>	
SCE Core-012	Online Buyers Guide
SCE TP-001	Appliance Recycling
SCE TP-013	California New Homes Program
SCE TP-014	Manufactured Housing New Construction Program
SCE Core-003	Business and Consumer Electronics Program
SCE Core-004	Plug Load Efficiency Program
SCE Core-005	Residential Lighting Program for Basic CFLs
SCE Core-006	Advanced Consumer Lighting
SCE TP-010	Home Energy Efficiency Survey
SCE Core-002	Home Energy Efficiency Rebate Program
SCE TP-011	Efficient Affordable Housing
SCE Core-007	Multi Family Energy Efficiency Rebate Program
SCE TP-009	Comprehensive Home Performance
<i>HVAC</i>	
SCE	All Core Programs
SCE -036	Savings By Design
SCE Core-014	California New Homes
SCE TP-008	Comprehensive Mobile Home Program
SCE TP 011	Efficient Affordable Housing
<i>Local Government Partnerships</i>	
SCE-LGP-34 to SCE-LGP-51 and SCE-LGP-54, 55, 57, 59	Local Government Partnerships
SCE-TP-066	ICLEI/ILG/LGC Program
<i>Marketing, Education, and Outreach</i>	

SCE Core-071	Integrated M&O
SCE Core-70	Statewide Marketing, Education & Outreach
<i>Integration</i>	
SCE-TP-066	Sustainable Communities Program
SCE-TP-032	Sustainable Portfolio Program
SCE-TP-029	IDSMS for Food Processing
<u>Southern California Gas</u>	
<i>Industrial</i>	
SCG 3 rd Party D	Third Party Programs- VeSM
SCG 3 rd Party O	Third Party Programs – Small Industrial Facilities Updated
SCG 3 rd Party R	Third Party Programs – Online Industrial Energy Efficiency Training Modules
SCG 3 rd Party S	Third Party Programs – Steam Trap and Compressed Air Survey
<i>Commercial</i>	
SCG Core-4	Non-Residential Custom Energy Efficiency Core Program
SCG Core-3	Non-Residential Standard Energy Efficiency Program
<i>Residential</i>	
SCG Core 16	Sustainable Communities
<i>Integration</i>	
SCG Core 9	Strategic Development & Integration
SCG Core 16	Sustainable Community Case Study

2.3 Additional Information Required – PG&E

2.3.1 Industrial

Industrial Core Program (PG&E Core – 003)

Further detail is needed on the following Strategic Plan-related activities and issues:

- Describe specific strategies and action steps that will be taken in 09-11 period, and partners, milestones and timing for these steps.
- Describe capacity building for continuous energy management steps that will be taken in 09-11 period, including partners, milestones, and timelines.
- Indicate linkages to national partnerships.
- Describe WE&T training programs in industrial sector, or reference location where this is clearly described for the industrial sector elsewhere.
- Discuss how additional funding will be leveraged (i.e., national programs or partnerships).

Third Party Programs

- Describe why funding two compressed air third party programs (TP- 013 and 014) is a strategic approach. Describe how these programs will develop markets and provide training to participating companies.

- Explain why a prescriptive approach, using a list of potential measures, is a strategic approach for the food processing sector (TP-043).
- Explain why projected savings from one waste water third party program (TP-043) are so much higher than those from a second, somewhat similar program under Agriculture [TP-043, Process Wastewater Treatment Energy Management Program for Agriculture and Food Processing] . Explain approaches and timelines to share findings across these programs mid-cycle in a way that will strengthen both offerings.
- Provide rationale for continuation of VeSM program. If there are no current or projected savings, describe why the program should continue.

2.3.2 Residential

California New Homes Multi-family (PG&E TP-027)

- Does this program promote consistency between other IOU multifamily new construction programs? If so, describe how.
- How does this program improve on the current program?
- Are measures with lower realization rates in 06-08 (pin-based CFL fixtures) being phased out?

Mass Market Downstream & Midstream/Upstream (PG&E –Core-008)

- Describe how comprehensive packages will be incentivized.
- Indicate what percentage of this program is residential vs. non-residential.
- Clearly indicate what percent of program savings and budget is going to screw-in CFLs.
- Identify where CEESP Advanced Lighting strategies are supported.
- Describe in greater detail what the purpose is of the training of retailer sales staff. Will there be PG&E field staff working with retail staff and does the training entail the use of in-store displays of the rebate-qualified appliances? Will the field staff that interacts with consumers be trained to educate consumers on Return of Investment of the EE rebate-qualified appliances?
- Describe how this program will work with the Pacific Energy Center training curriculum.
- Identify all market outreach channels and the strategies for those channels.
- Describe any customer segmentation used to enhance marketing approaches. Will specific customer segments be targeted with customized program offerings?

Direct Install for Manufactured Homes (PG&E TP 057)

Discuss the statewide implementation and impact of this program.

Zero Net Energy Pilots (PG&E-Core-018)

Most required PIP elements are present, but specificity could be improved in the following areas:

- Discuss comprehensiveness and avoidance of lost opportunities.
- Describe how this program fits with non-utility market trends.
- Discuss quantitative criteria for success. Present scenarios given different potential market futures.

- Describe milestones. How many pilot new homes will be constructed by 2011? What are the other indicators of success?
- With regard to the Zero Net Energy Website:
 - Indicate who the target audience is.
 - Describe how this effort will be of benefit statewide.

Low Income EE Program (PG&E Core-010)

- Describe the different marketing methods/channels used by LIEE contractors.

Integrated Audits (PG&E Core-012)

- Include information on the marketing channels that will be used to promote program offerings.
- Include information on how the program will be marketed through other DSM and DG (CSI) areas.

2.3.3 HVAC

Delivery mechanisms for HVAC programs were insufficiently described, as was alignment of programs with the California Energy Efficiency Strategic Plan. Re-filing must identify milestones for non-resource programs during 09-11 timeframe.

Mass Market Downstream (PG&E Core 008C)

- Identify rebates and incentives for HVAC measures.
- Identify program linkages to other IOUs and Strategic Plan.
- Explain milestones for non-resource elements.
- Describe the role of Quality Maintenance (QM).
- Identify coordination with or linkages to Quality Installation (QI) and Energy Star branding.
- The Logic Model for HVAC is not reflected in this program (ie, bundling of services, how market share will be increased, increased customer participation, or mention of requiring QI with every AC or furnace installed.)
 - Revised PIP must describe HVAC services and how these will be bundled, describe market share benchmarks and milestones to increase this, describe methods that will be used to increase customer participation, and describe methods that will be used to require QI with every AC or furnace installed.

Mass Market Upstream (PG&E Core 008B)

- Identify rebates and incentives for measures.
- Identify program linkages to other IOUs and Strategic Plan.
- Explain milestones for resource and non-resource elements.
- Identify product offerings and service packages.
- Include in program a description of how HVAC on-board diagnostics will be offered as an upstream incentive to manufacturers.

Emerging Technologies (PG&E Core 017)

- Stronger coordination with RD&D, PIER, and Codes & Standards is needed for better implementation. Strategies need to identify climate and transmission grid locations where opportunities may be lost and efforts should be targeted.

Energy Savers – Sm. Business (PG&E TP 030)

Furniture Store EE (PG&E TP 041)

Cool Cash (PG&E TP 056)

Direct Install Mfg. & Mobile Homes (PG&E TP 032)

- These programs need to be enhanced with linkages to the CEESP.
- These programs need to incorporate QI/QM as central components.

2.3.4 Local Government Partnerships

Local Government Partnerships (PG&E-GP-001 to PG&E-GP-018)

For re-filing, use LGP PIP template.

For the University of California (UC)/California State University (CSU), California Community Colleges (CCC), California Department of Corrections CDC), University of San Diego (USD), San Diego Water Authority (SDWA) use the standard template.

Be sure to address the following in the completed PIP templates:

Code Enforcement Program Element

- Describe draft code enforcement program in more detail, including its three-pronged approach.
- Which codes are earmarked as most important for local governments to enforce?
- Identify barriers to this work and how they will be overcome
- Identify goals for the three year cycle and milestones to reaching them using tables in the PIP template

Reach Code Element

- Describe PG&E’s draft code program in more detail, identifying which reach codes will be promoted and where.
- Identify goals to be reached in the three-year cycle, barriers to reaching them, how they will be overcome, and interim milestones.

Small Business and Residential Direct Install (DI)

- Describe how local governments will customize DI programs to meet local needs and interests while still allowing for the streamlining PG&E seeks.
- Describe what percentage of lighting is expected as compared to HVAC, refrigeration, etc. in small business DI.
- Describe how small business DI will bundle measures by site to increase comprehensiveness, and whether this will occur in every partnership.
- Describe the percent of each partner’s budget that will be allocated to fund residential DI in homes just above the LIEE income ceiling.

Government Building Retrofit

- Profile the government building retrofit approaches that are likely to be used by LGPs, including large experienced LGPs and newer LGPs with less EE experience.

Government Building Retro-commissioning

- Describe strategies for aggregating smaller government buildings so they can be retro-commissioned cost-effectively, and the number of partners that would use this approach.
- Describe the cost-effectiveness of this approach for energy savings and its effectiveness in terms of comprehensiveness.

Marketing by Local Governments

- Describe this program element including its cost-effectiveness and budget per contract.

On-Bill Financing

- Describe PG&E's plans to offer this to local governments in the 2009-2011 cycle, including how much funding will be available for government buildings.

Innovator Pilot (PG&E-Core-19)

Use LGP PIP template. Re-filed PIP must:

- Describe how this program fits with CEC, ARB, or other activities and goals of State agencies.
- Describe how this program harnesses market trends.
- This program seems to support the CEESP strategy for researching "Decision Triggers" especially with regard to GHG awareness. The PIP should specifically address this.
- Describe whether and how this program will identify low income communities for involvement in the program.
- Describe schedule and selection plan.
- Describe selection criteria.
- Indicate how many pilots will be funded and with what average budget.
- Outline strategies or innovations PG&E expects to pilot with details about the nature of each one, including milestones and goals for that pilot strategy in the cycle.
- Describe the implementation mechanism that will be used to turn the budget into action.
- Describe the quantitative and qualitative goals and success indicators that will be used.
- Describe linkage to the Climate Smart Program.
- Define "marketing agents" and their role.
- Explain market segmentation and its importance here.
- Explain what "community level" means in this context.
- Explain how further climate planning by local governments is needed before pilots can be selected and how this planning will change the nature of pilots proposed, or insure they are successful.

Green Communities (PG&E-GP-20)

Use LGP PIP template.

- Describe how the peer-to-peer program will function including level of travel cost recovery and reimbursement for peers making a site visit; how many visits will be conducted during the cycle, including how many per year; how many visits each partner could be allowed; which CEESP strategies will be promoted for visits; how one peer will be connected to another; and how many expert peers are anticipated to participate.
- Describe how the \$13 million balance in the Green Communities program will be allocated (i.e., among how many entities, who the entities will be, how they be selected, when they be selected, using what criteria, who they give assistance to, which modes of delivery will they use and for which topics).
- Describe what portion of the \$17 million will be spent each year.
- Describe how this work will coordinate or interface with similar LGP-supporting SDG&E, SCG and SCE programs.
- Describe how the work of regional providers such as GVC, SBC and ABAG will be different than and/or coordinate with the work of ICLEI - Local Governments for Sustainability, the Institute for Local Government, and the Local Government Commission. Please describe PG&E's vision for coordinating Green Communities with foundations, agencies such as the BCDG, and other organizations, and to what interim milestones and ultimate goal.
- How can ED be involved in deciding 1) who is selected for funding from the unallocated balance? 2) which CEESP strategies are promoted by these programs and how?

2.3.5 Marketing, Education, and Outreach

Education & Training (PG&E Core-016)

- Include information on the degree to which the Energenius program will be expanded/changed from 2006-08 program cycle.
- Include more information on how the Energy Center Stockton will market program offerings to low income communities.

2.3.6 Integration

Integrated Energy Audit Program / Zero Net Energy Pilot Program (PG&E Core-012 and 018)

Describe how the program will promote incentive options that encourage higher levels of integration within the boundaries established by existing programs. For example, for the audit program, this discussion would include a focus on the level and detail of information that will be provided to the customer (i.e., payback at a package level) and linkages to available incentives and how this impacts payback.

2.4 Additional Information Required – SDG&E

2.4.1 Commercial

All Programs (SDG&E)

- Expand the problem statement and provide additional information on market transformation plans, avoiding lost opportunities, applying best practices, and the specifics of the implementation mechanisms proposed.

Financing components

- Provide more information about the proposed structure of what appear to be three different financing arrangements (OBF, utility ownership of large-scale “green energy” equipment, and a community bank for small business loans), indicating for each whether ratepayer or shareholder funds would be used, if each will be rate-based or not, and who bears the risk of non-performance.
- Provide an explanation by loan fund source of expected loan amounts, interest rates, and expected participation. Also indicate how lending will be integrated with program delivery.

K-12 Private Schools & Colleges (SDG&E TP 12-O)

SaveGas Hot Water Control with Continuous Commissioning (SDG&E TP 12-R)

Healthcare EE (SDG&E TP 12-S)

- Indicate how implementation will utilize comprehensive approaches to installation of measures.

2.4.2 Residential

Residential Energy Efficiency Program (SDG&E Core-2)

- Describe the best practices contained within the early replacement element of this program.
- Describe and discuss what information barrier issues retailers will be trained to address such as simple payback, emission reductions, peak reduction, etc.
- Clearly describe the coordination between the program elements which support the CEESP’s Plug Load strategy, Whole House strategy, iDSM strategy, and WE&T strategy.

Statewide Residential Upstream Lighting (SDG&E Core-4)

- Provide a breakdown of proposed savings by measure grouping – indicate what percent is advanced technology lighting and what percent is basic CFL.
- Clearly describe specific internal targets supportive of other State efforts and especially AB 1109.
- Describe whether there are plans to distribute these bulbs at public events either directly initiated by this program or through other programs such as third party information programs.

Residential New Construction Energy Efficiency (SDG&E Core-16)

- Specifically describe the incentive levels.
- Describe the framework of the Advanced Home program, its sub categories, and how they all work together?
- Discuss plug loads and how they will be addressed in this program.
- Describe what specific demand response program components builders will have the opportunity in which to participate.
- Describe and visually explain how the many SDG&E HVAC programs coordinate with RNC.

2.4.3 HVAC⁶

Many of the programs need linkages to the CEESP HVAC chapter as an informed resource for program direction. It is recommended that SDG&E develop partnerships with SCE and perhaps LADWP to better leverage its programs.

REEP – (SDG&E Core-2)

- Describe how this home retrofit market aligns with CEESP strategies. Include in revised program an audit for HVAC and QI/QM.

Savings By Design (SDG&E – Core-7)

- This program has no linkages to the Strategic Plan for HVAC, although the testimony references it as being a part of the Strategic Plan. Include such linkages in refiled PIP.

Residential New Construction (SDG&E Core-16)

- There is a lack of implementation information for this program, so it is difficult to tell what benefits relating to HVAC are encompassed or implemented. Provide clear implementation info in refiled PIP.

Electric Resistant Heating (SDG&E TP #L)

- This program targets a specific market to upgrade thermostats for space heating. It would be a wasted contact effort if the thermostat is all that is addressed. Provide information in refiled PIP that explains other components of program.

EE for Entertainment Centers (SDG&E TP #M)

- This program is common also to SCE, but in both cases lacks a sufficient description of its delivery mechanism. Provide enhanced description in re-filing.

2.4.4 Local Government Partnerships

- Use the template for LGPs.
- For all local government partnerships (city and county) describe the marketing and outreach as a program element, including providing budget and identifying milestones, etc.

⁶ These comments on HVAC sector apply to SGC as well.

- For the University of California (UC)/California State University (CSU), California Community Colleges (CCC), California Department of Corrections CDC), University of San Diego (USD), San Diego Water Authority (SDWA) use the standard template.

2.4.5 Integration

Strategic Development & Integration (SDG&E Core-13)

Sustainable Community Case Study (SDG&E Core-20)

- Describe how the program will promote incentive options that encourage higher levels of integration within existing programs. For example, for an integrated audit tool, this discussion would include a focus on the level and detail of information that will be provided to the customer (ex: payback at a package level) and linkages to available incentives and how this effects payback, etc.

Sustainable Communities (SDG&E Core-20)

- Discuss what effect is expected from Sempra's participation in this multi-stakeholder project.
- Describe the expertise that Sempra can bring that no other stakeholder can bring.

2.5 Additional Information Required – SCE

2.5.1 Industrial

Industrial EE Program (SCE -22)

- Identify partners, timing and milestones for the development of a certification program for continuous improvement.
- Discuss timeline and plans for participation in national DOE SEPP program.
- Identify partners, timing and milestones for the integration of GHG and other resource goals.
- Identify partners, timing and milestones for the establishment of a clearinghouse for technical and regulatory information.
- Provide details on the referenced water efficiency pilot program.
- Discuss participation in the development of a national curriculum for certification for workforce and education training program in the industrial area.
- Provide data with accurate estimates for industrial sector energy efficiency savings (Energy Division – SCE discussions noted that table in Strategic Plan may need revision).

2.5.2 Commercial

Third Party Programs (SCE)

- Provide a rationale for the use of more than one third party program in the following areas: data centers; monitoring-based commissioning programs; programs that target real estate owners or non-owner occupants, programs that target private schools.

- Integrate responses to the questions included in Appendix A into re-filed program implementation plans.

2.5.3 Residential

Online Buyers Guide (SCE Core-012)

- Describe the strategy for directing traffic to the website.
- Describe key milestones or penetration targets necessary for successful implementation of this online coordination and information program.
- Provide more information on how various information channels, e.g. TopTen,, will be used to ensure consistent and cohesive messages, and how various websites may be used in different residential or commercial programs.
- Provide more information on how marketing efforts will be coordinated with retailers participating in the program.

Appliance Recycling (SCE TP-001)

- Describe and illustrate the process whereby customers are directed to this program from the Home Energy Efficiency Survey (HEES) program and the Home Energy Comparison Tool.
- Discuss the “Lessons Learned” from 2006-08 coordination /collaboration with SCE Home Energy Efficient Rebate program, Multi Family Energy Efficient Rebate program, or Home Energy Efficiency Survey programs and clearly indicate how these lessons learned will be implemented into this continued program.

California New Homes Program (SCE TP-013)

- Explain the benefit of the calculated incentive approach *to single fuel IOUs*
- Describe the analysis that led to the incentive amounts within the calculated incentive structure. Describe the degree to which SCE confident these incentives will move markets.
- Discuss and present a calculation of assumptions to move 50% of market in 2011 to 35% above 2005 Title 24.
- Describe how the CANHP supports Tier 2 of NSHP.
- Describe the coordination and leveraging of the AMI decision and the funds within already earmarked for In Home Display pilots.
- Describe the flow of lessons, information, and marketing between the Advanced Home statewide program, Sustainable Communities, and CANHP.

Manufactured Housing New Construction Program (SCE TP-014)

- Provide more detail about the Education and Outreach component and the degree that it leverages other SCE programs.
- Describe the flow of lessons, information, and marketing between the Advanced Home statewide program, Sustainable Communities, and this program.

Business and Consumer Electronics Program (SCE Core-003)

- Indicate who is responsible for training the retailers’ sales staff to promote these electronics and who is responsible for the design or in-store displays.

- Describe and illustrate how the Online Buyers' Guide will be promoted through the program and whether the Flex Your Power (FYP) website will be one of the media channels.
- Describe the state of coordination or co-branding with Topten. Include the plan for ensuring that the products promoted by the BCEP program will meet the Topten list and that Topten listed products are available at identified retailers.
- Describe methodology to train sales staff to talk about pay back period from future energy savings, as well as "Standby" mode energy use and solutions.
- Specifically describe and discuss which of the non-energy environmentally friendly attributes of these products your company will focus on and why they were chosen.
- Indicate how customer information will be collected for evaluation purposes.

Plug Load Efficiency Program (SCE Core-004)

- Provide more specifics on the promotion and use of comprehensive energy visual monitoring and display. Describe how you will be working with the manufacturers of these devices and contributing to a user-friendly display.

Residential Lighting Program for Basic CFLs (SCE Core-005)

- Describe plans to distribute general CFL bulbs at public events. Will they be initiated by this program or through other programs such as third party information programs?

Advanced Consumer Lighting (SCE Core-006)

- List in the PIP which measures expected to be part of the exchange component of the program.
- Provide more details on your support of educational efforts to enhance the public's understanding of AB32.
- Describe any major plans to use other marketing channels in addition to bill inserts (e.g. events or other media). Provide more details on the field staff support and training of sales staff specific to the lighting showroom described in the original PIP.
- Provide more information on how various marketing and outreach efforts will use consistent and cohesive messages, and how various websites may be used in different residential or commercial programs.
- Provide more information on the different ways customers will be educated on proper CFL disposal and clean up procedures. These ways could include, but are not limited to the following:
 - Requesting that manufacturers put a website address and 800 number on the stem of CFLs that directs people to information on for proper disposal and clean up information.
 - In-store displays that provide customers with information on CFL disposal/clean up information.
 - Easily accessible web content on both SCE and FYP websites.

Home Energy Efficiency Survey (SCE TP-010)

- Describe clearly the opportunities the aggregated data from online audits may provide.

- Describe why the On-line Buyers Guide should not be implemented on a statewide level similar to the HEES program.
- Discuss the WE&T element for in-home auditors.
- Discuss the ability for users to compare their results to others.
- Describe the segmentation and prioritization of certain segments. Will homeowners be prioritized for participation?
- Describe how smart plug strips are or are not planned to be used in this program.

Home Energy Efficiency Rebate Program (SCE Core-002)

- Describe how the HEER program fits with the suite of SCE Market Based programs such as Top Ten.

Efficient Affordable Housing (SCE TP-011)

- Describe the use of or coordination with a home energy labeling system such as HERS.
- Discuss the assurance of long term savings through retro commissioning.
- Discuss the potential for multifamily property owners to be eligible for On-Bill financing or other innovative financing.

Multi Family Energy Efficiency Rebate Program (SCE Core-007)

- Describe how measures that are being flagged by current M&V efforts for low realization rates are eliminated from rebates or are improved so that the realization rate is acceptable (e.g. pin-based CFLs).

Comprehensive Home Performance (SCE TP-009)

- Describe program milestones and pathways to greater market penetration.
- Explain and illustrate the coordination between this program and the HEES program.

2.5.4 HVAC⁷

SCE Core Programs- all

- Provide milestones for non-resource programs.
- Identify linkages across the portfolio with the CEESP Strategic Plan components for HVAC and with SCG HVAC for the following programs.

Savings By Design (SCE -036)

- Describe the strategies linking this program to the Strategic Plan for HVAC.
- Describe how linkages will be made with SCG for successful implementation of this program with HVAC.

California New Homes (SCE Core-014)

- Describe the strategies linking this program to the Strategic Plan for HVAC.
- Describe how linkages will be made with SCG for successful implementation of this program with HVAC.

⁷ See also HVAC comments on SDG&E programs.

Comprehensive Mobile Home Program (SCE TP-008)

- Describe how the program will develop linkages with the CEESP for HVAC and QI/QM.
- Describe if and how the program will benefit with uniform audit and installation practices.

Efficient Affordable Housing (SCE TP 011)

- Describe how the program will develop lacks linkages with the CEESP for HVAC and QI/QM.
- Describe if and how the program will benefit with uniform audit and installation practices.

2.5.5 Local Government Partnerships

Local Government Partnerships (SCE-LGP-34 to SCE-LGP-51 and SCE-LGP-54, 55, 57, 59)

Use the LGP PIP template to report by contractor all LGPs including San Bernardino, Riverside and Los Angeles counties.

For the University of California (UC)/California State University (CSU), California Community Colleges (CCC), California Department of Corrections CDC) use the standard template. (SCE-LGP-52, 53, 56, 58).

CEESP Strategies

- Describe how partners and their member cities will accomplish CEESP strategies that are not explicitly funded in each LGP budget, how, and to what extent or degree.

Los Angeles County Partnership

- Indicate what LA County will perform on program elements that do not have a budget item, how, and to what extent or degree by a quantitative measure, if possible
- Describe how building retrofit or retro-commissioning work will be accomplished in the facilities of non-county public agencies in the unincorporated areas of LA County such as the MTA, school districts, water agencies, etc. (e.g. who will work with these agencies to recruit their interest, help them through the audit, project management process, etc.)
- Describe what the goals are for these non-county buildings in the 2009-2011 cycle including what funds will be allocated and to whom for the retrofit, outreach and assistance.
- Describe if any retro-commissioning will be performed by the Los Angeles County partnership in the next cycle including an explanation of why or why not.
- Indicate how much the Los Angeles County budget will be decreased in the 2009-2011 cycle and what the rationale is for this.

Retro-commissioning

- Identify the retro-commissioning goals for SCE partnerships in the 2009-2011 cycle in terms of number of buildings per partnership, and the rationale for these goals.
- Indicate what the goals are for the county government partnerships in particular by PIP.

Government Building Retrofits

- Describe how program elements will be bundled by site for comprehensiveness and cost-effectiveness
- Identify whether and how often measures and incentives will be customized
- Identify the percentage of lighting that will be installed as compared to HVAC, refrigeration, etc.

Marketing by Local Governments

- Describe this program element including its cost-effectiveness and spending per contract.

On-bill Financing

- Describe how much funding will be available for local government on-bill-financing.

Demand Response

- Describe the demand response efforts that will be integrated into energy efficiency work, including audits, with local governments (use discussion prompts in the LGP PIP template).

Energy Leader Model

- Identify the level in the Energy Leader Model that pertains to the PIP.

ICLEI/ILG/LGC Program (Sustainable Communities Implementer) (SCE-TP-066)

- File a complete PIP using the LGP PIP template to describe the program, its audience, goals, outcomes, etc.
- Describe how the peer-to-peer program will function including level of travel cost recovery and reimbursement for peers making a site visit; how many visits will be conducted during the cycle, including how many per year; how many visits will one partner could be allowed; which CEESP strategies will be promoted for visits; how one peer will be connected to another, how many expert peers will cultivated.
- Describe the levels of funding that will be spent each year.
- Describe how this work will coordinate or interface with work ICLEI/ILG/LGC will be performing for SDG&E & PG&E.

2.5.6 Marketing, Education, and Outreach

Integrated M&O (SCE Core-071)

- Describe any additional customer segmentation analysis to enhance this program's outreach efforts.
- Indicate if interactive marketing campaign tactics will be used and if so whether they are web based. If so, give examples.

2.5.7 Integration

Sustainable Communities Program (SCE-TP-066)

Sustainable Portfolio Program (SCE-TP-032)

IDSMS for Food Processing (SCE-TP-029)

- Describe how the program will include incentive options that promote higher levels of integration within the boundaries established by existing programs.
- Explain all concepts described in the PIP (ex: Green Leasing Toolkit, addressing split incentive solutions, developing alternative financing options, incentive caps, etc.). The PIP should describe not just “what” SCE plans to do but also provide brief explanations of how SCE plans to address identified issues.

2.6 Additional Information Required – SCG

2.6.1 Industrial

Third Party Programs- VeSM (SCG 3rd Party D)

- Provide rationale for continuation of program despite lack of reported savings for 2006-2008 period. Provide budget, estimated savings, and pipeline data.

Third Party Programs – Small Industrial Facilities Updated (SCG 3rd Party O)

- Provide budget and savings estimates.

Third Party Programs – Online Industrial Energy Efficiency Training Modules (SCG 3rd Party R)

- Explain how “bonuses” will be determined and how they will be valued.
- Explain how rebates will be awarded through this non-resource program.
- Provide budget including the amounts estimated for bonuses and rebates

Third Party Programs – Steam Trap and Compressed Air Survey (SCG 3rd Party S)

- Provide itemized budget including costs of designing and maintaining a website.

2.6.2 Commercial

Non-Residential Custom Energy Efficiency Core Program (NRCEE)(SCG Core-4)

Non-Residential Standard Energy Efficiency Program (SCG)

- More clearly describe how alternative financing opportunities will be identified and implemented.
- Clearly describe how the split incentives initiative is designed including how the initiative might apply to all DSM opportunities, how incentives will be calculated, and at what level.
- Use of used equipment in programs is not recommended and should be removed from the program.
- Discuss how strategies advance non-IOU initiatives and EE opportunities.

2.6.3 Residential

Sustainable Communities (SCG)

- Discuss what impact is expected from Sempra’s participation in this multi-stakeholder project.
- Describe the unique expertise that Sempra can bring to this project.

2.6.4 HVAC

2.6.5 Local Government Partnerships

Use LGP PIP template. Note: for UC/CSU, CCC, and CDCR use standard template).

2.6.6 Integration

Strategic Development & Integration (SCG Core-9)

Sustainable Community Case Study (SCG Core-16)

- Describe how the program will promote incentive options that encourage higher levels of integration within existing programs. For example, for an integrated audit tool, this discussion would include a focus on the level and detail of information that will be provided to the customer (ex: payback at a package level) and linkages to available incentives and how this effects payback, etc.

3 High Quality Program Implementation Plans (PIP)

3.1 High Quality PIPs – PG&E

3.1.1 HVAC

Enhanced Time Delay (PG&E TP – 032)

Lodging Savers (PG&E TP – 004)

Energy Star Mfg. Homes (PG&E TP – 046)

Local Government Partnerships

Marketing, Education, and Outreach PIPs

Agriculture PIPs

Workforce, Education, and Training PIPs

3.1.2 Integration

PG&E’s Description of the Integrated Audit program

3.2 High Quality PIPs – SDG&E

3.2.1 Commercial

Savings by Design (SDG&E)

HVAC Financing (SDG&E)

Non-Residential Custom EE Program (SDG&E)

3.2.2 Residential

Time of Sale Energy Check-Up (SDG&E TP)

3.2.3 HVAC

AC TIME (SDG&E #J)

20% Cooler (SDG&E #I)

Premium Efficiency Cooling (SDG&E #Q)

3.2.4 Integration

Sustainable Communities Program (SDG&E- Core-20)

3.3 High Quality PIPs – SCE

3.3.1 Residential

California New Homes Program (SCE TP-013)

Comprehensive Home Performance (SCE TP-009)

Manufactured Housing New Construction Program (SCE Core-014)

Sustainable Communities (SCE TP-066)

3.3.2 HVAC

Residential/Light Commercial HVAC (SCE Core-19)

Savings By Design (SCE Core-03)

Comprehensive Home Performance Program (SCE TP – 009)

Manufacturing New Construction – (SCE TP-013)

3.3.3 Workforce, Education, and Training

Structure between the Synergies, Earth Education & Training, & Strategic Planning PIPs (PIPs in need of revision for other issues)

3.3.4 Integration

SCE’s description of approaches to integrated metrics (stand-alone integration chapter)

3.3.5 Commercial

Business and Consumer Electronics Program (SCE Core-003)

3.4 High Quality PIPs – SCG

3.4.1 Integration

Sustainable Communities Program

4 Energy Division Data Request Summary

4.1 All IOUs- Summary

Energy Division Data Requests for 2009-2011 Energy Efficiency Portfolio Applications				
<u>Date</u>	<u>Utility</u>	<u>Rec'd</u>	<u>Requestor</u>	
7/24/2008	PGE	7/24/2008	Anne	Provide Excel Spreadsheets, Portfolio Applications
7/24/2008	SCE	7/25/2008	Anne	Provide Excel Spreadsheets, Portfolio Applications
7/24/2008	Sempra	-	Anne	Provide Excel Spreadsheets, Portfolio Applications
7/24/2008	PGE 1	8/1/2008	Anne	Provide a Results of Operation Model supporting request for 3 capital additions under EM&V: ZNE Pilot, Data Management Platform and additional Software
7/28/2008	PGE 2	7/31/2008	Cathy	Fix Corrupted Web Links, Appendix E & F
7/28/2008	SCE	7/31/2008	Anne	Provide Rate and Revenue Increase notice and tables - Supplement to Application
7/28/2008	PGE		Cathy	Provide PIPs NonRes New Construction, Program Name-Budget-Savings Impacts & PIP ID#
7/28/2008	Sempra		Cathy	Provide PIPs Partnerships, 3rd Party & LGPs - Program-Budget-Savings Impacts, List of All PIPs w/ID#s
8/4/2008	PGE 3	8/8/2008	Anne	Bridge Funding Data Request - Pre PHC: 7 Questions on revenues, rates, continuing programs
8/4/2008	SCE	8/8/2008	Anne	Bridge Funding Data Request - Pre PHC: 7 Questions on revenues, rates, continuing programs
8/4/2008	Sempra		Anne	Bridge Funding Data Request - Pre PHC: 7 Questions on revenues, rates, continuing programs
8/8/2008	SCE		Peter	Review of E3 Calculators - Measure Detail & C-E Submission: Base Scen. - Export File
8/8/2008	PGE		Peter	Review of E3 Calculators - Measure Detail & C-E Submission: Scen.2 - Import-Export File

4.2 All IOUs- Specifics

Missing Information – Data Requests

PG&E:

1) Anne Premo. Requested 7/28:

Please provide a full RO and workpapers in Excel format supporting the capital additions requested in your application. Those cap adds are: ZNE Demo project (Chapter 3) and the MDSS software (Chapter 5). It would be helpful to receive this information by the end of the week, August 1. Please call if you have any questions.

2) Cathy Fogel. Requested 7/28:

I. Information on Non-Residential New Construction programs.

The filing does not clearly indicate Non-residential New Construction programs. Please provide summary information and a Program Implementation Plan (PIP) for all non-residential new construction program elements, including budget and projected savings projections, and PIP #.

II. Corrupted web links

As of Wednesday, July 23, the following links were corrupted and not accessible on the PG&E website. Please ensure they are working properly:

- **Appendix E: NTG – Residential New Construction – Whole Building** the link leads to a corrupted document
- **Appendix H – SCENARIO 1 LGP Input-Output** this link seems to be missing since there’s an equivalent calculator for Scenario 2 LGP Input-Output

III. Program Implementation Plans (PIPs)

- A. ID #s are not included in the PIP list provided in the testimony (Appendix A) for several PIPs included in Appendix B, Volume I. Please provide the PIP ID# and/or a “Market Segment Plan ID#” for each of the following in yellow.
- B. Please provide a separate PIP ID#, projected budget and impacts for each state and green communities program (indicated in green).
- C. Please provide projected budget and impacts (Gwh, MW, therms) for the programs for which this information was not included in the PIPs (indicated in grey).
- D. Please provide a list of the PIPs with ID#s included in Appendix B, volume II, in the order in which they are included (blue).

<i>Pacific Gas & Electric</i>		
Program Name	Program Implementation Plan #	Please provide as per ED guidance document:
Agriculture	Please provide	
Agriculture / Food Processing	PG&E-Core-001	Projected budget and impacts (all)
Industrial	Please provide	
Industrial	PG&E-Core-003	Projected budget and impacts (all)
High Tech Facilities		Projected budget and impacts (all)
Commercial	Please provide	

Commercial & Trade	PG&E-Core-004	Projected budget and impacts (all)
Healthcare & Hospitality	PG&E-CORE-066	Projected budget and impacts (all)
Government & Public Service	PG&E-Core-007	Projected budget and impacts (all)
Schools, Colleges and Universities	PG&E-Core-005	Projected budget and impacts (all)
Residential	Please provide	
Residential New Construction	PG&E- Core-011	Projected budget and impacts (all)
LIEE	PG&E-Core-010	Provided in LIEE, please provide again here.
Cross-cutting	Please provide	
Mass Markets Downstream	PG&E-Core-008	Projected budget and impacts (all)
Mass Markets Midstream/Upstream	Please provide	Projected budget and impacts (all)
Integrated Audits	Please provide	
Statewide M&O	Please provide	
Statewide Partnerships	Please provide PIP number, projected budget and impacts for each statewide partnership (ie, GP-019-a; GP-019-b, etc)	
Green Communities Summary	Please provide PIP number, projected budget and impacts for each Green Community program (ie, GP-020-a; GP-020-b, etc)	
Education, & Training	Please provide	
Emerging Technologies	Please provide	
Zero Net Energy Pilots	Please provide	
Innovator Pilots	Please provide	
Workforce, Education and Training	Please provide	
Third Party PIPs	Please provide a list of PIPs, including ID#s, contained Appendix B, Vol	

	II, in the order that the PIPs are included (does not follow list in testimony).	
--	--	--

3) *Anne Premo, requested 8/4*

August 11, 2008 PHC Discussion, Bridge Funding Requests

In order to have a meaningful discussion about the Bridge Funding requests made in your testimony, please be prepared to address or provide:

1. A forecast of the average revenue collection per month based on the current 2006-2008 rates.
2. A table listing all continuing 2006-2008 Core, 3rd Party and Partnership programs by name, their current 3-year budgets, and expected monthly average spending rate.
3. The disposition of unspent, uncommitted funds in 2009.
4. Counting the savings for expenditures occurring in 2008 for 2009-11 continuing programs using bridge funding.
5. Counting the savings for expenditures occurring in 2009 using bridge funding.
6. How do the current Fund Shifting Rules operate during the Bridge Funding Cycle?
7. When do Mid-cycle additions apply?

If you have the information in advance of the PHC on Monday, it would be helpful to us if you could provide it.

San Diego Gas and Electric, So Cal Gas

1) Anne Premo, requested 7/28:

Sempra companies did not provide filled in tables required by Energy Division in Feb Guidance Document, on budgets, impacts, etc.

Joy –

These are the application tables needed for your filings.....Andrew Sickles and Mark McNulty were in on these along with Mike Wan (PG&E) and Darren Hanway (SCE). I have yet to see anything from Sempra. I need to get them in Excel format, unlinked.

2) Cathy Fogel, requested 7/28:

1) For each company, can you please provide, for partnerships, 3rd Party and LGPs:

- individual PIP # for each partner/3rd party program
- budgets and impacts by individual partner/3rd party program

2) Can you please also provide a summary list of all PIPs, including PIP ID#, estimated budget and impacts. This should be for both the compliance and the preferred scenarios.

3) Anne Premo, requested 8/4

August 11, 2008 PHC Discussion, Bridge Funding Requests

In order to have a meaningful discussion about the Bridge Funding requests made in your testimony, please be prepared to address or provide:

1. A forecast of the average revenue collection per month based on the current 2006-2008 rates.
2. A table listing all continuing 2006-2008 Core, 3rd Party and Partnership programs by name, their current 3-year budgets, and expected monthly average spending rate.
3. The disposition of unspent, uncommitted funds in 2009.
4. Counting the savings for expenditures occurring in 2008 for 2009-11 continuing programs using bridge funding.
5. Counting the savings for expenditures occurring in 2009 using bridge funding.
6. How do the current Fund Shifting Rules operate during the Bridge Funding Cycle?
7. When do Mid-cycle additions apply?

If you have the information in advance of the PHC on Monday, it would be helpful to us if you could provide it.

Southern California Edison

1) Anne Premo, requested 7/ 28:

In the applications the utilities file an overall table showing Illustrative revenue increases and class average rates – but SCE has failed to do so. SCE needs to do this, using current revenues, proposed revenue increases X customer Class X Bundled Service and X Direct Access, as well as showing class average rates and the proposed increases to rates and the percentage change. This is an application deficiency for SCE. It is not one of the application tables/graphs especially requested for the filing, since it is a usual table provided usually in the Application exhibit. (See PG&E, Sempra)

I will call Larry Cope to double check before we issue something, but this is not a data request of the usual order.

2) Anne Premo, requested 8/4

August 11, 2008 PHC Discussion, Bridge Funding Requests

In order to have a meaningful discussion about the Bridge Funding requests made in your testimony, please be prepared to address or provide:

1. A forecast of the average revenue collection per month based on the current 2006-2008 rates.
2. A table listing all continuing 2006-2008 Core, 3rd Party and Partnership programs by name, their current 3-year budgets, and expected monthly average spending rate.
3. The disposition of unspent, uncommitted funds in 2009.
4. Counting the savings for expenditures occurring in 2008 for 2009-11 continuing programs using bridge funding.
5. Counting the savings for expenditures occurring in 2009 using bridge funding.
6. How do the current Fund Shifting Rules operate during the Bridge Funding Cycle?
7. When do Mid-cycle additions apply?

If you have the information in advance of the PHC on Monday, it would be helpful to us if you could provide it.

4.3 SCE Commercial sector

Requested by George Tagnipes

SCE Program	Energy Division Question/Data Request
Commercial sector- Overall	1. Please provide a side-by-side comparison of the previous application that customers would use and the new “simplified” application to be used in 2009-2011.
	2. Is there a master table of incentives and caps offered through the portfolio? Presumably if this is more comprehensive, incentives will also be bundled and linked rather than stand alone.
	3. Please provide the “integrated audit” forms referenced on page 14 of the Commercial Market Sector Plan (Exhibit SCE-03, Tab # 18).
	4. Please provide information on coordinated marketing approaches to branded and regional chains and dealership networks. Is SCE aware of DOE’s Commercial Building Initiative? (CMSP)
Business Incentive Element	5. Will all applications – calculated, prescriptive, no-cost – be entered electronically into a central database or is there still a lot of hard copy forms to be filled out and manually entered.
	6. Please provide a breakdown of the budgets for the Business Incentive Element program by calculated, itemized, and no-cost component.
	7. Please provide baseline information on number and types of businesses participating in program from 06-08, as well as: a) criteria for targeting participants during 09-11 program; expected number of participants in market sub-sectors by end of 2011.
Financial Solutions Element	8. Please provide a flow chart of diagram that shows how FSE relates to BIE, BIS and other commercial sector programs. Specifically, where does the program fit in with the streamlined, integrated customer application process?
	9. What is the budget for OBF, EE Loan, and CER? Please provide baseline information on number and type of participants in current programs, where applicable, and targeted number and types of participants expected in all programs by end of 2011.

SCE Program	Energy Division Question/Data Request
	<p>10. Please explain the CER and linked Cool Planet programs further. Will the \$15,000 currently offered to participants for savings between 1-3 million kwh be continued in 09-11? Why is this considered a NR program? Define time periods for which offsets or allowances from such projects are thought to be allowable. Does CCAR currently have an EE reduction project methodology or protocol that will be used with this program? Please explain approval process for this program in '08 and what the prior name of the program was. What types of businesses is SCE targeting in this program?</p>
	<p>11. Please provide details on statement that “FSE will explore expanding OBF to other DSM programs.” Please explain appropriateness of statement that “defaulted loans will be debited from ratepayer funds” (p. 4).</p>
<p>Business Services Element</p>	<p>12. Please provide a budget breakdown for all subcomponents of the BSE program.</p>
	<p>13. Please provide the audit form used for identifying energy savings opportunities. These forms should include ways to identify other DSM program offerings.</p>
	<p>14. If BSE-Audit is a resource, will some customers claim savings if they eventually get an incentive through BIE?</p>
	<p>15. BSE has a RCx Assessment, Repair, and Maintenance component, which is a resource component. But the BIE program also states that SPC was expanded to include incentives for RCx. So is there a possible scenario where double dipping of claimed savings will occur? If current market penetration of RCx for buildings is 125 buildings, what is SCE’s target for number of participants by end of 2011? Please discuss SCE’s methodology for identifying customers that can “utilize a comprehensive method” (p. 8) and those that could not.</p>
	<p>16. Please provide a flow chart of how the Energy Benchmark program works: how a customer enrolls, what they do to find out if they are over/under performing, how SCE gets more customers to participate in EE programs, and how incentives are tied to the benchmarks, and how savings are claimed for this resource program</p>
	<p>17. Is the “Express Assist and Baselineing” component a mandatory service for customers or is it available only for those that know to ask for it?</p>
	<p>18. What was the Cool Planet program called in 2006-2008?</p>
<p>Commercial Energy Efficiency Program</p>	<p>19. What other criteria other than \$/kWh will be used in setting incentives?</p>

SCE Program	Energy Division Question/Data Request
	20. Please provide baseline information on number and type of current program participants and targets for participant types/numbers by end of 2011.
Entertainment Center for Energy Efficiency Program	21. Are the site audits used in this program the same as those used in BSE? Please provide audit forms. Are financing tools described for this program tied to FSE?
Private College Campus Housing Energy Efficiency Program	22. Please provide a list of private schools targeted for participation.
Management Affiliates Program	23. How many property management companies does MAP have enrolled currently and how many do they plan on getting in 2009-2011?
Healthcare Energy Efficiency Program	24. Does SCE already have a list of the 5 healthcare systems they think should participate? How do OSHPD requirements limit the pool of eligible participants?
Sustainable Portfolios	25. Does SCE already have a list of prospective participants and how does this differ from MAP or the Leased Office Space Program in terms of targeted market segment (I realized the measure offerings are different).
	26. When are “commitments” defined and where on the 6-step process would savings actually be realized?
Monitoring Based Commissioning	27. Please provide audit form
Leased Office Space Retrofit	28. Is it a program requirement that all sites get a benchmark score, as opposed to getting a score if a customer asks for it.
Monitoring Based Persistence Commissioning	29. Is the main difference between this program and the MBCx program is that MBCx targets DR customers specifically?
	30. Wouldn't MAP and Leased Office Space Retrofit program customers also fall into the group of customers to be identified in this program?

5 Appendix 1- Energy Division Memo on ETP Guidance

State of California

Memorandum



Date: May 28, 2008

To: EE Program Managers -
Duane Larson, PG&E
Don Arambula, SCE
Athena Besa, Sempra Utilities

From: Ayat Osman, Energy Division EE Section

Subject: PY 2009-2011 Filing Guidance for IOU Emerging Technology Programs

On May 16, Energy Division sent a guidance document for filing Program Implementation Plans (PIPs) for the Emerging Technologies Program (ETP) PY 2009-2011. After reviewing the PIPs submitted for the 2006-8 budget cycle and the Strategic Plan, we believe that the following underlined sections are critical to portfolio submissions for the 2009-11 Portfolio filing. We expect this description to be concise and greatly reduced from the 12 page PIP of 2006-8. Six elements are described below. Those that are underlined (1-3 and 6) are expected in the portfolio filing. The other will be developed after the filing and added as a supplemental document or modification to the filed PIPs.

1. **Projected Program Budget**
2. **Program Design and Strategy:** (addressing both *goals* and *objectives*, and *strategies* that are designed to meet those goals and objectives, as well as *activities* selected to carry out those strategies)
 - Program Rationale: (Why the Program exists? Market risks of adopting new technologies, Statewide synergies, market transformation etc.)
 - Program Goals and Objectives:
 - Design ETP goals and objectives to address both public policy goals and IOUs strategic plan

- Make sure that the program objectives are SMART (Specific, Measurable, Actionable, Reasonable, Time-dependent)
 - Select measurable objectives that are consistent with program theory and logic model (The logic model is in development and is not expected)
 - Identify and track key performance metrics associated with the measurable objectives that reflect progress towards the objectives (Key performance metrics should be identified, if known)
- Program Strategies (all)
- Identify promising technologies through well defined selection criteria
 - Reduce performance uncertainty and other market barriers through technology assessment and market research
 - Discuss strategies for information acquisition and dissemination
 - Describe strategies to cross the chasm and describe ETP role in market transformation
 - Establish strategies for feed-back loop from EE resource acquisition programs to ETP staff to identify reasons for low adoption rates or success (e.g. immature infrastructure such as the absence of training programs, unacceptably high incremental cost, unacceptably low performance)
 - Discuss any necessary improvements in the market infrastructure (e.g. training HVAC installers, training retail sales force.)
- Program Activities (define each stage and discuss to which extent is it consistent with the statewide ETP activities – each IOU has a different view of these stages and what they connote.)
- Screening
 - Scanning
 - Assessment
 - Transfer/Deployment

Going forward, a database and tracking system of technologies, as well as unique ETP measure names, needs to be developed, as outlined below. Part of the ETP program description above should outline the plan and the steps necessary to develop this tracking tool. The description is retained below for clarity.

3. Quality Assurance and Evaluation Activities

- Track all data necessary to assess statewide ETP coordination
- Reliably track adoption of ETP measures in EE resource acquisition programs
- Track all information necessary to conduct both process and impact evaluations based on guidelines set forth in the California Protocols
- Track key metrics related to important program activities, outputs, and outcomes.
- Establish and update ETP internal tracking and the ETCC databases
- Provide work-papers in electronic format
- Describe any plans to conduct a process evaluation of PY 2009-11

4. ETP measure name

- Please discuss your plans for developing unique ETP measure names. Measure name should describe:
 - Unique ID linking the measure to the internal ETP tracking database
 - Measure code that can be linked to a unique and detailed description of the ETP measure
 - Year of ETP deployment
 - IOU that initiated the assessment
- Example - ETP_SCE_001_HVAC26_2007

5. Program Tracking Database

Please discuss your plans to develop an internal program tracking database that is consistent across all four IOUs. Please discuss which variables you intend to include in your internal tracking databases. Below is a partial list of variables that should be included.

- Name of the technology

- Unique ETP ID
- Description of the technology
- Current status (screening, assessment, transfer/deployment)
- Year in which screening began
- Funding year of assessment
- The year in which the assessment was launched
- The year in which the technology was deployed
- Estimated time to transfer to EE resource acquisition program
- Specific program (name and program number) to which a technology was transferred (internal-same IOU, external-across IOUs or broader market)
- Estimated cost (labor and non-labor)
- Estimated supplemental funding available (Other sources of co-funding)
- List of ETP IOUs that received working papers for a technology and the year in which they were delivered
- Targeted sector (e.g. Commercial-HVAC, Residential-HVAC, Agricultural pumps, Residential pumps, if cross-sector specify)
- Original source of information about a technology (e.g. PIER, Manufacturing, Other RD&D)
- Anticipated Savings (kWh, kW, Therm)

6. Summary Table of major ETP elements for overall application