

# 1. Strategic Plan Program Budget Reductions

## 1.1 On Strategic Plan Program Budgets D. 09-09-047 states:

- OP 13d: “The utilities shall not unduly reduce Strategic Planning non-administrative costs as compared to resource program direct implementation non-incentive costs” (p. 369).
- “We further prohibit the utilities, as discussed below, from unduly reducing Strategic Planning non-administrative costs as compared to the budget reduction targets we call for with resource program direct implementation non-incentive costs below” (p. 57)

**ED Finding:**

- **PG&E’s total portfolio budget was reduced by 18% between July 2009 filing and D. 09-09-047, while Strategic Plan program budgets were reduced by an average of 42%.**

**Table 1. Reduction in “non-protected” Strategic Plan program budget from \$140 million to \$61 million (from 8.6% to 4.6% of the portfolio).<sup>1</sup>**

| Energy Division-modified Pacific Gas and Electric Company<br>Workpaper Supporting Advice 3065-G/3562-E Compliance with D.09-09-047 OP 13.d (Dec<br>Strategic Plan Support vs. Resource Program Direct Implementation Non-Incentive Costs<br>Modified by altering order of program list and including ZNE pilot budget as approved |   |  |                  |  |                  |
|---|---|--|------------------|--|------------------|
| Line No.  | PG&E Program  | From Testimony Table 2b-1 (adjusted) and Appendix C - Budget Workbook JUL. 2009<br>(in millions) | Pct of Portfolio | From Compliance AL - Appendix C - Budget Workbook NOV. 2009<br>(in millions) | Pct of Portfolio |
| 1   | WE&T (Excluding Energy Centers)   | \$ 11.659  |                  | \$ 7.096   |                  |
| 2   | Emerging Technologies   | \$ 47.226  |                  | \$ 23.200  |                  |
| 3   | HVAC WE&T   | \$ 1.843   |                  | \$ 1.746   |                  |
| 4   | Residential New Construction  | \$ 27.083  |                  | \$ 13.522  |                  |
| 5   | Partnerships (Innovator Pilots)   | \$ 17.339  |                  | \$ 4.326   |                  |
| 6   | Strategic Plan-Oriented EM&V Studies  |  |                  |  |                  |
| 7   | ZNE Pilots <sup>2</sup>   | \$ 25.000  |                  | \$ 7.613   |                  |
| 8   | Lighting Market Transformation  | \$ 0.449   |                  | \$ 0.463   |                  |
| 9   | Third Parties - WE&T <sup>3</sup>   | \$ 3.333   |                  | \$ 3.335   |                  |
| <b>10</b>   | <b>Total Strategic Plan Program Budget (Energy Division definition)</b>   | <b>\$ 133.995</b>  | <b>8.2%</b>      | <b>\$ 61.299</b>   | <b>4.6%</b>      |
| 11  | Total Portfolio Budget  | \$ 1,632.915   |                  | \$ 1,337.994   |                  |
| 12  | Residential Whole House <sup>4</sup>  | \$ 3.961   |                  | \$ 46.000  |                  |
| 13  | Statewide Marketing   | \$ 24.948  |                  | \$ 24.948  |                  |
| 14  | Strategic Planning Organization   | \$ 3.600   |                  | \$ 3.600   |                  |
| 15  | On-Bill Financing   | \$ 29.451  |                  | \$ 27.845  |                  |
|   | <b>Total Additional Program Budgets (included by IOUs as “Strategic Plan” programs but excluded by Energy Division)</b> | <b>\$ 61.960</b>   | <b>4%</b>        | <b>\$ 102.393</b>  | <b>8%</b>        |
| <b>16</b>   | <b>Total Portfolio Budget</b>   | <b>\$ 1,632.915</b>  |                  | <b>\$ 1,337.994</b>  |                  |

<sup>1</sup> Excludes “protected” Strategic Plan programs mandated in D. 09-09-047 (Whole House Retrofits); programs required prior to completion of the Strategic Plan (on-bill financing; Statewide ME&O); and programs ED staff could not locate (Strategic Planning Organization). The Whole House Retrofit Program is excluded from the analysis of IOU responsiveness to OP13d as it was specifically mandated as a budget increase in D. 09-09-047.

<sup>2</sup> ZNE budget decreased from \$30.7 million to \$25 million as per D. 09-09-047

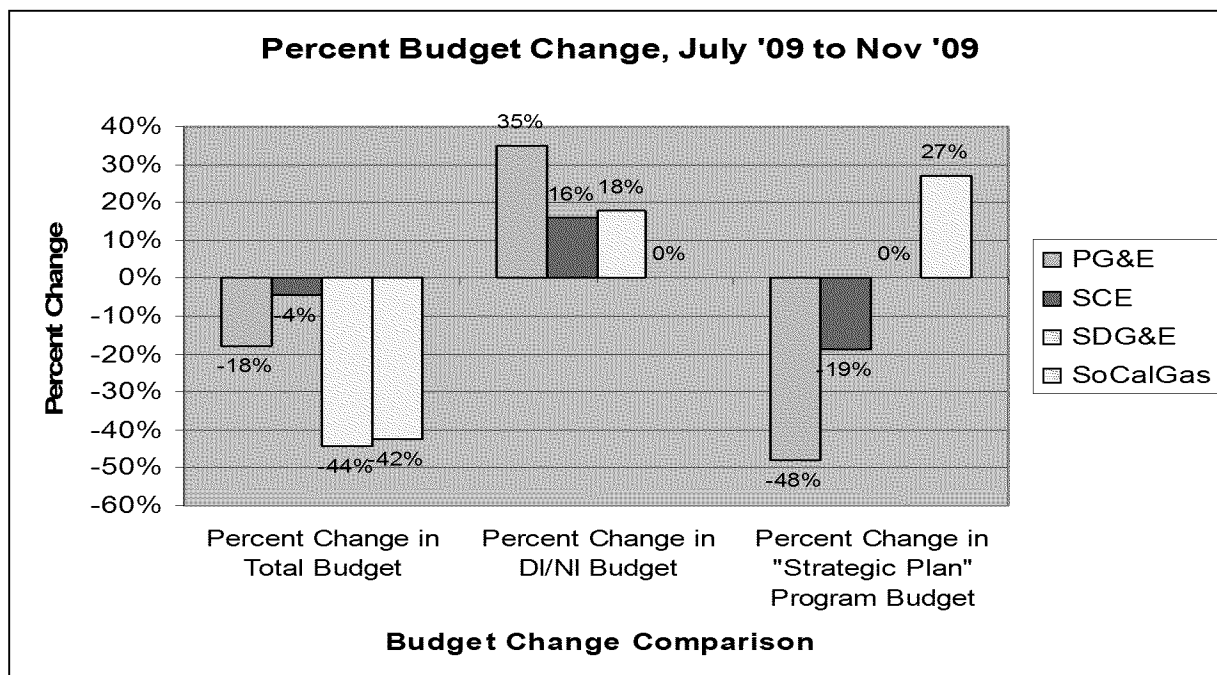
<sup>3</sup> and 3- Added by PG&E to July 2009 Table 2b-1 Strategic Plan budget for comparison with November 2009

**Table 2: Percent Change in Strategic Plan Programs**

| PG&E Budget Comparison for Strategic Plan Programs: July 2009 to Compliance Filing (Nov, 2009) |                    |                   |              |                    |
|--|--------------------|-------------------|--------------|--------------------|
|  | Jul-09             | Nov-09            | % Change     | Budget Change      |
| WE&T (Excluding Energy Centers)  | 11,660,000         | 7,096,002         | -39%         | -4,563,998         |
| Emerging Technologies  | 47,226,006         | 23,199,866        | -51%         | -24,026,140        |
| HVAC WE&T  | 1,843,379          | 1,745,544         | -5%          | -97,834            |
| Residential New Construction   | 27,082,900         | 13,521,688        | -50%         | -13,561,212        |
| Partnerships (Innovator Pilots)  | 17,338,798         | 4,326,248         | -75%         | -13,012,550        |
| Individual Partnership Budgets - Strategic Plan Spending Set-aside                             | \$7,666,315        | \$3,862,025       | -50%         | -3,804,290         |
| ZNE Pilots   | 25,000,000         | 7,612,643         | -70%         | -17,387,357        |
| Lighting Market Transformation   | 449,187            | 462,565           | 3%           | 13,379             |
| <b>Total Strategic Plan Program Budget</b>   | <b>138,266,584</b> | <b>61,826,582</b> | <b>-55%</b>  | <b>-76,440,002</b> |
| <b>Average % change</b>  |                    |                   | <b>-42%*</b> |                    |

\* SoCalEdison’s Sustainable Communities Program funded at \$7.9 million

**Table 3: Percent Change in IOU budget categories**



**1.2 On the IOUs statewide Emerging Technologies Program, D. 09-09-047 states:**

“The Strategic Plan strives to create market pull and deployment of emerging technologies *at a desired scale*, engaging utilities, private entities, national labs, local governments and consumers is essential. In addition, the Strategic Plan (at 84) establishes the following goals for the utilities’ emerging technologies programs:

- Refocus utility and Energy Commission energy efficiency research and technology support to **create both demand pull and set the research agenda for both incremental and game-changing energy efficiency technology innovations....**
- Conduct target emerging technologies R&D to support the Big, Bold Energy Efficiency Strategies and integrated energy solutions goals. This goal should result in profound improvement in equipment efficiency as well as new building materials and designs aimed at achieving more efficiency form new buildings than technically feasible today, and necessary to achieve Zero Net Energy and hot/dry climate HVAC outcomes. “ (p. 243).

The proposed ETP is composed of [several] core program elements:

- **Scaled Field Placements – new element.** This program element will be used to place a number of measures at customer sites as a key step to gain market understanding and traction. The measures will typically have already undergone an assessment or similar evaluation to reduce risk of failure.

**Demonstration Showcases – new element.** *These possibly large-scale projects will expose measures to various stakeholders utilizing in situ, real-world applications and installations.*

**Technology Development Support – new element.** The ETP will look for opportunities to benefit energy efficiency product development. Although in most cases, product development is best performed by private industry, the ETP under unique opportunities will be able to undertake very targeted, cost-effective activities which provide value in support of private industry product development efforts.

**Business Incubation Support – new element.** TRIO (Technology Resource Incubator Outreach) is a statewide program that is focused on **providing training and networking for developers of energy saving technologies.** TRIO is an incubation program designed to accelerate the successful development of technologies through an array of engineering support, resources and services, developed and orchestrated by TRIO management and offered both in the incubator and through its network of contacts. TRIO acts as a diffusion process by which an innovation is communicated through certain channels over time among the members of a social system. (p. 244-245).

**Table 4: Virtual Elimination of Four Emerging Technology Subprograms.**

Spending for the four sub-programs (Scaled Field Placements, Demonstration/Showcasing, Technology Supply Side Efforts and Incubation) declined from \$13 to \$1.3 million. Sub-programs were based on priorities identified in Strategic Plan.

| Emerging Technology Programs | Emerging Technologies Program |  | July Budget          | November             | Difference             | Percent budget remaining |
|------------------------------|-------------------------------|--|----------------------|----------------------|------------------------|--------------------------|
|                              | <b>PGE2108</b>                | <b>Total ET Program</b>                    |                      |                      |                        |                          |
|                              | <b>PGE21081</b>               | Assessments                                | \$30,731,085         | 19,106,905           | (11,624,180)           | 62.2%                    |
|                              | <b>PGE21082</b>               | Scaled Field Placement                     | \$4,977,958          | <b>296,220</b>       | (4,681,738)            | 6.0%                     |
|                              | <b>PGE21083</b>               | Demonstration / Showcasing                 | \$5,048,541          | <b>396,131</b>       | (4,652,409)            | 7.8%                     |
|                              | <b>PGE21084</b>               | Market and Behavioral Studies              | \$2,804,656          | 2,807,096            | 2,440                  | 100.1%                   |
|                              | <b>PGE21085</b>               | Technology Supply Side Efforts             | \$1,592,902          | <b>296,220</b>       | (1,296,682)            | 18.6%                    |
|                              | <b>PGE21086</b>               | Incubation                                 | \$1,432,016          | <b>297,294</b>       | (1,134,722)            | 20.8%                    |
|                              | <b>PGE2112</b>                | Zero Net Pilots (was CC)                   | \$30,697,168         | 7,612,643            | (23,084,525)           | 24.8%                    |
|                              |                               | <b>TOTAL EMERGING TECHNOLOGIES PROGRAM</b> | <b>\$ 77,923,174</b> | <b>\$ 30,812,510</b> | <b>\$ (47,110,665)</b> | <b>39.5%</b>             |

**1.3 On PG&E’s ZNE Pilot Programs, D. 09-09-047 states:**

“PG&E’s proposed ZNE Pilot Program subprograms directly address needs identified within the Strategic Plan for accelerating California’s progress towards the 2020/2030 ZNE goals... Therefore, **we conditionally approve PG&E’s ZNE Pilot Project at the level of \$25 million on a pilot project basis only**, a \$6 million decrease from the requested budget. As a pilot project, we require PG&E to submit via advice letter additional information on the ZNE Pilot Program as outlined in Section 4.3 above.” (p. 178).

Table 5. ZNE Pilot program budget reduced 75% and critical program elements approved in D. 09-09-047 were eliminated.

**ED Finding: - The ZNE Pilot Project as proposed in the Compliance Filing (November 2009):**

- **Eliminated targets for execution of agreements for design assistance and technical support for five to fifteen teams.**
- **Reduced targeted number of near-ZNE pilot homes and near- ZNE commercial case studies to receive design, technical and financial assistance from 8-12 near-ZNE pilot homes to 3, and from 2-6 pilot near-ZNE commercial buildings from 2-6 to 3.**
- **Eliminated plan to publish report on ZNE performance case studies after two years of normal occupancy.**
- **Eliminated key studies "Assessment of the Technical Potential for Achieving Net Zero Buildings in the Commercial Sector" and a report "Lessons Learned from Field Evaluation of Six High Performance Buildings"**
- **Reduced the number of ZNE technology assessment reviews from between 5-15 to 3-6**  
**Eliminated commitment to creating and maintaining a ZNE resource website, and plans for press releases, journal, trade publication and other website articles.**
- **Eliminated commitment to create a statewide roadmap to achieve ZNE goals, including strategies to include customer behavior into product development by the end of 2010, as well as other customer behavior study recommendations.**
- **Eliminated an annual design competition to encourage architecture and engineering firms to create ZNE developments and buildings.**
- **Dropped commitment to 2-4 forums to encourage and support interactions between developers, production builders, architects, engineers, city and regional planners and funders to address ZNE development.**
- **Eliminated commitment to present between ten and twenty workshops annually on ZNE design through the existing education and training network, public meetings, conferences and trade shows.**

## 2. On- Bill Financing - CPUC Expectations of Loan Program Implementation

D.09-09-047 (OP 2, p. 365) ordered all programs to begin January 1, 2010.

**Ordering Paragraph 2 (p. 365):** "The energy efficiency program cycle for Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company shall start on January 1, 2010. All approved energy efficiency programs should begin January 1, 2010. The energy efficiency portfolios approved today will be in effect for 2010 through the end of 2012.

**ED Finding and Recommendations:**

- ***SCE will have all components of its loan program for both commercial and institutional customers fully operational by June 2010.***
- ***That no later than July 2010 PG&E will offer energy efficiency financing to commercial and institutional customers so that they can make use of building retrofit programs before the 2010-12 cycle is too far underway.***
- ***That all aspects of the On-Bill Financing Program except the capability to bill installments on the monthly energy bill be fully established and operating by this date. That includes marketing and outreach, contractor engagement, and other internal processes.***

- *In the interim, that PG&E may use an off-bill financing mechanism that has proven to be successful and should be explained in a supplemental filing to be acceptable to the Energy Division and major stakeholders. A description of this option should be included in a OBF Advice Letter with an updated OBF PIP. PG&E should also include targets by year for lending based on number of customers and amount loaned across institutional and commercial sectors, and by geography.*

### 3. Increase in Resource Program Direct Implementation Non-Incentive (DINI) Budgets from 21% to 28% of total portfolio budget.

On the DINI 20% soft target, D. 09-09-09-047 states:

OP 13c. "Non-resource costs (excluding non-resource [program] direct implementation costs) are set at 20% of the total adopted energy efficiency budgets" (p. 369).

We find compelling the evidence provided by TURN in its April 2009 comments that shows national trends for administrative costs, EM&V levels, ME&O budgets and other areas... (p. 72)

We also set a budget target of 20% on the non-incentives and rebates budgets for program delivery, consistent with the national average in Table 5 below (excluding Vermont as an outlier). ***Of the four utilities, this measure impacts only PG&E's budget. PG&E's proposed program delivery budget includes non-incentives and non-rebate costs of 35%. With the 20% budget target we set, more of the program costs will be available for incentives and rebates, thus bringing PG&E's costs in line with the other utilities as well as the national average (p. 74).***

... we seek to streamline PG&E's budget consistent with the caps and targets discussed above... (p. 77)

PG&E's budget shows \$534 million for 'Direct Implementation (Non-incentives and Rebates).'... These activities are generally consistent with a broad-based energy efficiency program. However, some of these activities are peripheral to the direct delivery of energy efficiency services and may not contribute to the cost-effectiveness of PG&E's portfolio... ***We reduce resource program indirect and support activities to 20% of the total portfolio.*** This is the national average of program delivery costs (excluding incentives and rebates) shown in Table 5 above, and is consistent with or higher than the level of costs for SCE, SDG&E and SoCalGas. ***By reducing these costs to approximately 20% of the adopted budget level, PG&E's indirect and support costs for resource programs are reduced from \$336 million to \$275 million, a reduction of \$61 million" (p. 78-79).***

#### **ED Finding:**

- ***All other IOUs met this soft target with Resource Program DINI budgets at between 9-19% of total portfolio budgets.***

**Table 6- Summary of PG&E Resource Program DI/NI Budget Changes (July-Nov, '09).**

| Line No. | Direct Implementation  | From Appendix C -<br>Budget Workbook<br>JUL. 2009<br>(in millions) | Pct of<br>Portfolio | From Compliance<br>AL - Appendix C -<br>Budget Workbook<br>NOV. 2009<br>(in millions) | Pct of<br>Portfolio |
|----------|--|--|---------------------|---|---------------------|
| 1        | <u>Resource Programs Direct<br/>Implementation Non-incentives***</u> | \$ 335.670   | 20.6%               | \$ 372.973  | 27.9%               |
| 2        | <u>Whole House Performance<br/>Program Direct Implementation</u>     | \$ 1.166   |                     | \$ 40.638   | -                   |
| 3        | <u>Total Resource DI Non-Incentive<br/>w/o Whole House</u>           | \$ 334.504   | 20.5%               | \$ 332.334  | 24.8%               |
|          | <b>Budget Reduction to<br/>move towards soft target</b>              | <b>\$ 27.</b>  |                     | <b>\$ 305.334</b>   | <b>22.8%</b>        |

\*\*\* The primary driver for the change is the \$39.5 million increase in direct implementation NI costs for the Residential Whole House Program mandated in D.09-09-047. Total includes third party and government partnership direct implementation budgets. (bold added by Energy Division). **This ED analysis assumes that most Whole House DINI budgets will be transferred to incentive budgets once specific measures and incentive levels have been finalized.**

**Table 7: Summary of PG&E Resource Programs with large DINI budget increases between July (2009) and November (2009)**

| Appendix C: PG&E 2010 - 2012 Program Budget Workbook (revised 11/23/09)  |   |  |  |   |
|--|---|--|--|---|
| <i>Note:</i> Data indicated as "estimated" represent forecasts of budgets. Data indicated as "Actual" represents accurate budget totals. |   |  | Percent<br>DI/NI<br>Budget<br>Increase<br>(July '09 to<br>Nov '09) | Program Overall<br>Budget Change<br>(July '09 to Nov '09) |
| Program #  | Main Program Name / Sub-Programs  | DINI Budget<br>Change (July<br>'09 to - Nov '09) |  |   |
| PGE2182  | Boiler Energy Efficiency Program  | 6,072,953  | 738%   | 23% increase  |
| PGE2186  | Enhanced Automation Initiative  | 156,483  | 236%   | <b>1% decrease</b>  |
| PGE2200  | Furniture Store Energy Efficiency   | 1,409,756  | 258%   | 71% increase  |
| PGE2201  | High Performance Office Lighting  | 2,876,182  | 232%   | 57% increase  |
| PGE2203  | Monitoring-Based Commissioning  | 1,916,453  | 232%   | 21% increase  |
| PGE2204  | SmartVent for Energy-Efficient Kitchens   | 1,759,680  | 319%   | 43% increase  |
| PGE2212  | California Preschool Energy Efficiency Program  | 390,631  | 187%   | no budget change  |
| PGE2214  | EE Entertainment Centers  | 986,013  | 543%   | 68% increase  |
| PGE2222  | Energy Efficiency Services for Oil Production   | 4,041,295  | 121%   | 11% increase  |
| PGE2225  | Refinery Energy Efficiency Program  | 4,676,415  | 390%   | <b>4% decrease</b>  |
| PGE2227  | Cement Production and Distribution Energy Efficiency                                  | 1,816,488  | 224%   | 43% increase  |
| PGE21031   | Calculated Incentives   | 15,944,517                                       | 3037%  | <b>35% decrease</b>                                       |
| PGE21032   | Deemed Incentives   | 2,363,943  | 203%   | 4% increase   |
|  | Process Wastewater Treatment EM Pgm for Ag Food Processing                            | 918,700  | 272%   | 77% increase  |
| PGE21041   | Residential New Construction  | 3,392,259  | 545%   | <b>50% decrease</b>                                       |
| PGE21042   | Savings By Design   | 9,373,792  | 667%   | 1% increase   |
| PGE21071   | C&S Advocacy & CASE Studies: Building Codes<br>C&S Advocacy & CASE Studies: Appliance | 6,767,150  | 820%   | 3% increase   |
| PGE21072   | Standards   | 5,718,830  | 680%   | 3% increase   |
| PGE21073   | C&S Compliance Enhancements Training  | 934,843  | 719%   | 3% increase   |
|  | Total   | 65,443,431                                       |  |   |