

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



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Utility Cost and Revenue Issues Associated
with Greenhouse Gas Emissions.

Rulemaking 11-03-012
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**THE DIVISION OF RATEPAYER ADVOCATES'
UPDATED PROPOSAL FOR USING CAP-AND-TRADE
ALLOWANCE REVENUES**

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I. INTRODUCTION

Pursuant to the November 16, 2011 “Joint Administrative Law Judge’s Ruling Adopting Modified Schedule” and the December 28, 2011 “Administrative Law Judge’s Extending Deadline Judge’s Joint Scoping Memo and Ruling,” the Division of Ratepayer Advocates (DRA) provides additional details about how its proposal to use greenhouse gas (GHG) allowance revenue for the benefit of ratepayers would be implemented, if adopted by the Commission. The essential elements of DRA’s proposal, filed October 5, 2011, remain unchanged and the proposal is attached at Appendix A¹ to this update.

DRA’s proposal would return 90 percent of the anticipated revenue to ratepayers whose rates increase because of the cap-and-trade program in the form of annual rebate checks. DRA proposes to allocate the remaining 10 percent of the allowance revenue to help fund the “Consolidated Financing Program,” a mechanism that would finance energy efficiency improvements, and for administrative expenses related to ratepayer bill relief. The rationale for the 90/10 allocation is discussed in Section II A below.

The purpose of the Consolidated Financing Program would be to fund, develop, and implement financing mechanisms that would leverage the capital raised from ratepayers with private capital to make low interest loans or financing available for energy efficiency projects, thereby addressing a significant market barrier to implementing more costly energy efficiency improvements.² Section II B below explains DRA’s proposed implementation of the Consolidated Financing Program.

Section III C below sets forth the process for implementation of DRA’s proposal to educate customers about the bill impacts of the cap-and-trade program, including the resulting

¹ DRA’s proposal, attached as Appendix A to this document, does not include the Attachments that were filed on October 5, 2011, but the complete filing is available at <http://docs.cpuc.ca.gov/EFILE/RESP/145229.htm>. DRA’s updated proposal includes its revised analysis in Section II A on the cost impacts of cap-and-trade, which replaces the cost discussion in DRA’s original proposal at page 14 (Pacific Gas and Electric Company), page 15 (Southern California Edison Company (SCE)), and page 16 (San Diego Gas & Electric Company). DRA’s updated proposal refers collectively to PG&E, SCE and SDG&E as Utilities. Attached as Appendix B are revised tables (which replace tables 3, 4 and 5 in DRA’s original proposal) illustrating cap-and-trade cost and credit allocation using the Utilities’ forecasted costs based on projected emissions.

² The Division of Ratepayer Advocates’ Comments In Response to Administrative Law Judge’s Ruling Requesting Comments Regarding 2013 Bridge Funding and Mechanics of Portfolio Extension 2013, filed, June 16, 2011 in R.09-11-014, p. 7.

rate increases for some customers, the bill relief provided through the return of allowance revenue, and ways that customers can mitigate rate increases and reduce GHG emissions.

An important feature of any mechanism to use GHG allowance revenue for the benefit of customers is ensuring that the cap-and-trade program does not cause energy intensive trade-exposed (EITE) customers, such as California fruit and vegetable processors, to decrease production in California, allowing increased production outside of California. DRA believes that its proposal to return 90 percent of the revenue to customers who experience bill impacts will achieve that goal, but if other parties make recommendations that appear more likely to prevent leakage³ from EITE customers, DRA would consider such recommendations.

II. DISCUSSION

A. DRA’s proposal to return 90 percent of the GHG allowance revenue to ratepayers in the form of annual rebates, while using 10 percent to finance long-term investments in energy efficiency and to pay for administrative expenses related to bill relief, promotes the goals of the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32.

The main focus in this proceeding is determining what portion of the GHG allowance revenue that the Utilities will generate from the sale of allowances they receive from the California Air Resources Board (ARB) should be returned directly to customers to offset GHG compliance costs versus what portion, if any, should be used to fund other programs that will result in GHG emission reductions. DRA proposes using 90 percent of the GHG revenue for direct bill relief and 10 percent for a Consolidated Financing Program (CFP) for energy efficiency investments and for the administrative costs of bill relief. In order to understand the reasoning why DRA proposes to use a given amount of GHG revenue for specific purposes, it is important to examine the cost burden of the cap-and-trade regulation, as well as other policies that California has enacted to reduce GHG emissions, and to consider the purpose of

³ Emission leakage occurs when “the decrease in emissions generated by California-based firms (reflecting their loss of market share) is offset by an increase in emissions by out of state firms as the latter gains market share.” Economic and Allocation Advisory Committee, “Allocating Emissions Allowances Under a Cap-and-Trade Program: Recommendations to the California Air Resources Board and California Environmental Protection Agency,” (EAAC Report) March 2010, p.46; *see also* California Health and Safety Code Section 38505(j).

compensating ratepayers for those costs with the revenue from the freely allocated GHG allowances.

1. Cost Burden of the Cap and Trade Regulation

The first aspect of assessing the cost burden of policies to reduce GHG emissions is to establish common cost assumptions. While the Investor Owned Utility (IOU) Rate Impact Model is a valuable tool for understanding how GHG costs and revenues will be spread among customer classes given the current rate structures, and how specific individual customers' bills will be impacted, it does not accurately represent the Utilities' cap-and-trade costs. In other words, the cost burden of cap-and-trade for the Utilities is not a function of the GHG allowances they receive from ARB,⁴ but is instead a function of the GHG emissions that result from Utilities serving their customers.

For the cap-and-trade regulation, the cost assumptions are a product of the GHG emission forecasts for each utility and the price of GHG allowances from 2013 to 2020. The GHG emissions for the three Utilities from 2013 to 2020 were forecasted in the CPUC's ongoing Long Term Procurement Plan (LTPP) Rulemaking (R.)10-05-006 using CPUC Standardized Planning Assumptions⁵ and are shown in Table 1⁶. The emissions forecast for each IOU includes both the IOU's direct GHG obligations (e.g. utility-owned generation, tolling agreements, electricity imports) and its indirect GHG exposure (i.e. financial exposure to market purchases).⁷

⁴ The IOU Rate Impact Model calculates additional generation costs by multiplying the total GHG allowances an IOU is freely allocated by the price of GHG allowances, and then dividing that number by the portion of their sales that go to bundled customers. This results in a cost burden that is approximately equal to 90 percent of what an IOU is freely allocated, which is not as accurate as calculating the cost based on each IOU's projected emissions.

⁵ R.10-05-006, Administrative Law Judge's Ruling Requesting Post Workshop Comments, Updating Standardized Planning Assumptions, and Providing Lawrence Berkeley Report of Modeling Issues; Appendix B: Standardized Planning Assumptions for Bundled LTPP Filings, December 23, 2010.

⁶ DRA is not including SCE's confidential GHG positions for years 2013 and 2014 in this proposal.

⁷ R.10-05-006, Pacific Gas and Electric Company Bundled Procurement Plan Public Version, April 15, 2011, p.81; R. 10-05-006 Track II Testimony of Southern California Edison Company Public Version, March 25, 2011, p.41; R.10-05-006 Track II Prepared Direct Testimony of Robert Anderson on Behalf of San Diego Gas and Electric Company Public Version, March 25, 2011, Attachment 2. Available at: http://www.cpuc.ca.gov/PUC/energy/Procurement/Procurement/LTPP_Bundled_Plans.htm.

Table 1. GHG Emissions Forecast (Million Metric Tons CO₂e; CPUC LTPP Track II Standardized Planning Assumptions)

	2013	2014	2015	2016	2017	2018	2019	2020
PG&E	19.1	17.6	17.4	17.1	17.2	17.1	17.5	15.7
SCE			17.0	16.9	18.0	17.9	17.1	17.0
SDG&E	4.9	4.4	4.5	4.4	4.4	4.5	4.4	4.4

For estimating the price of GHG allowances, DRA uses the Synapse Mid-Case GHG price forecast developed in the 2009 MPR, the same forecast that SCE used in the 2010 LTPP proceeding.⁸ Synapse’s GHG price forecasts are shown in Table 2.

Table 2. Synapse GHG Price Forecast (\$/Metric Ton CO₂)

	2013	2014	2015	2016	2017	2018	2019	2020
Low GHG Price Forecast	\$13.37	\$15.81	\$18.26	\$20.93	\$23.62	\$26.53	\$29.47	\$32.44
Mid Case GHG Price Forecast	\$19.18	\$22.67	\$26.19	\$30.01	\$33.87	\$38.04	\$42.25	\$46.80
High GHG Price Forecast	\$22.29	\$26.35	\$30.44	\$34.89	\$39.36	\$44.21	\$49.11	\$54.06

Based on these GHG price estimates, and the GHG emissions forecasts developed in the LTPP for each IOU, Table 3² shows the total GHG cost exposure per year that each IOU could face under the cap-and-trade regulation. The total cost exposure of the cap-and-trade regulation to ratepayers from all three Utilities over the years 2013-2020 could exceed \$9 billion.

Table 3. Total GHG Exposure (Millions of \$; Synapse Mid Case CO₂ prices)

	2013	2014	2015	2016	2017	2018	2019	2020
PG&E	\$366	\$399	\$456	\$513	\$583	\$650	\$739	\$735
SCE			\$445	\$507	\$610	\$681	\$722	\$796
SDG&E	\$94	\$100	\$117	\$131	\$148	\$171	\$186	\$205

2. Cost Burden of Other Policies to Reduce GHG Emissions in California

California has adopted numerous complementary policies to cap-and-trade that will lead to GHG emissions reductions in the electricity sector, including the Renewables Portfolio

⁸ R.10-05-006, Testimony of Southern California Edison Company (Public Version), April 20, 2011, p.15.

² DRA is not including SCE’s confidential GHG positions for years 2013 and 2014 in this proposal.

Standard (RPS) and the energy efficiency portfolios of the Utilities. Some of these programs have high costs to ratepayers, especially the RPS. In the LTPP proceeding, testimony submitted on behalf of the Joint Utilities concludes that the CPUC Cost-Constrained Scenario results in a present value revenue requirement that is \$16.9 billion higher than the All-Gas Case through 2020.¹⁰ The testimony explains that this value can be thought of as the net cost to ratepayers, in present value terms, of the RPS program over 10 years.¹¹

While the above market costs of the RPS¹² can be calculated, it would require further analysis to determine if all of these costs should be attributed to reducing GHG emissions. In theory, the Utilities' energy efficiency portfolios are cost-effective, a conclusion that DRA has disputed in A.08-07-021 and R.09-11-014, but even if the energy efficiency portfolios are not cost-effective, the portfolios are intended to achieve other goals beyond GHG reduction. DRA would therefore not attribute all above-market costs to GHG reduction. It would also require further analysis to determine the impact that renewable development under the RPS and energy efficiency investments will have on the price of carbon under cap-and-trade. Presumably, if there had been no renewable development in California, and only a cap-and-trade program, the GHG costs under cap-and-trade would be driven upwards, perhaps significantly.

3. Revenue Received from Free Allocation under the Cap-and-Trade Regulation

Each utility is freely allocated a quantity of GHG allowances by the ARB on behalf of its customers. As presented by the ARB at the November 1, 2011 workshop, the quantity of allowances allocated to each IOU is based on the expected cost burden of the cap-and-trade regulation, early investment in RPS-eligible renewable resources, and projected energy

¹⁰ Joint IOU Supporting Testimony (Exhibit IOU-1), R.10-05-006 LTPP Track I System Resource Plan, July 1, 2011, Page A-83.

¹¹ Joint IOU Supporting Testimony (Exhibit IOU-1), R.10-05-006 LTPP Track I System Resource Plan, July 1, 2011, Page A-83.

¹² Above market costs of the RPS are costs of renewable energy that exceed the costs of comparable conventional generation.

efficiency savings.¹³ Table 4 shows the quantity of GHG allowances that are annually freely allocated to each IOU through 2020.¹⁴

Table 4. Allocation to IOUs (000's of MT CO2e)

	2013	2014	2015	2016	2017	2018	2019	2020
PG&E	25,035	24,872	24,071	23,765	24,190	23,426	23,186	22,733
SCE	32,700	31,689	31,484	29,631	26,954	25,976	25,110	24,808
SDG&E	6,931	6,560	6,436	6,416	6,470	6,298	6,198	6,156

Using the same Synapse Mid Case GHG price forecast used to develop the total GHG cost exposure, Table 5 shows the total potential GHG revenue for each IOU.¹⁵ The amount of revenue given to each IOU exceeds the expected customer cost burden of cap-and-trade in all years of the program. The total revenue that the utilities will be given on behalf of ratepayers could exceed \$14.9 billion from 2013 to 2020.

Table 5. Total Potential GHG Revenue (Millions \$; Synapse Mid Case GHG Price Forecast)

	2013	2014	2015	2016	2017	2018	2019	2020
PG&E	\$480	\$564	\$630	\$713	\$819	\$891	\$980	\$1,064
SCE	\$627	\$718	\$825	\$889	\$913	\$988	\$1,061	\$1,161
SDG&E	\$133	\$149	\$169	\$193	\$219	\$240	\$262	\$288

4. Rationale for 90/10 allocation in DRA's Proposal

DRA has proposed that 90 percent of the GHG revenue is used for direct bill relief and 10 percent for a Consolidated Financing Program (CFP) for energy efficiency investments and for administrative expenses related to bill relief. The 90/10 allocation follows the intent of the ARB regulation and the recommendations of the Economic and Allocation Advisory Committee

¹³ ARB, Carbon Prices in Electric Rates and the Implication for Allowance Allocation to Leakage Exposed Industrial Sources, Presentation at November 2, 2011 CPUC Workshop.

¹⁴ Allocation recommendations from ARB's July 2011 Discussion Draft.

¹⁵ Note that the price that an IOU purchases a GHG allowance for and the price that an IOU receives for an allowance may not always match due to the timing of buying and selling allowances and market price fluctuations.

(EAAC)¹⁶, is equitable, and could promote the success of cap-and-trade in California and beyond. The 90 percent for direct bill relief will ensure that ratepayers receive the vast majority of GHG revenue directly to mitigate the increased costs of electricity under AB 32, while preserving the kWh rate increase intended to flow through the economy and create change in customer actions. Given the current rate structure, it is most equitable to return the GHG revenue to ratepayers who are incurring the GHG costs. DRA also believes it is important to set a precedent for long term GHG reduction investments with 10 percent of the GHG revenue. As the EAAC observes, energy efficiency financing could address a significant market barrier to implementing more costly energy efficiency improvements.¹⁷ Additionally, a recent study on the Regional Greenhouse Gas Initiative (RGGI) shows that although carbon prices tend to increase electricity prices in the near term, there is also a lowering of prices over time because the states have invested a substantial amount of allowance proceeds on energy efficiency programs that reduce electricity consumption.¹⁸ It is important that California uses this opportunity to invest in energy efficiency financing that will lead to long term GHG reductions and will set an example for other states and regions to follow, thus increasing the chances of a successful economy and nation-wide cap-and-trade program.

As Table 6¹⁹ shows, even when the 10 to 15 percent of GHG revenue is passed through to Direct Access (DA) and Community Choice Aggregation (CCA) customers²⁰ and 10 percent of the GHG revenue is used for DRA's proposed CFP and for administrative expenses under DRA's proposal, there is still significant GHG revenue in excess of the expected cap-and-trade cost burden. This additional revenue should also be included in the direct bill relief to ratepayers, with the intent of mitigating a portion of the above-market renewable costs.

¹⁶ The Economic and Allocation Advisory Committee is a panel of economists established by the ARB and the California Environmental Protection Agency to advise ARB on issues regarding the cap-and-trade regulation, including the use of allowance revenue.

¹⁷ EAAC Report, p.48 and 55.

¹⁸ The Economic Impacts of the Regional Greenhouse Gas Initiative on Ten Northeast and Mid-Atlantic States: Review of the Use of RGGI Auction Proceeds from the First Three Year Compliance Period, November 15, 2011, p.3 and 34. Available at: http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Economic_Impact_RGGI_Report.pdf.

¹⁹ DRA is not including SCE's confidential GHG positions for years 2013 and 2014 in this proposal.

²⁰ As estimated by the Utilities in the Rate Impact Model: PG&E – 10%; SCE – 12.7%; SDG&E – 15%.

Under DRA’s proposal, the additional revenue for direct bill relief in excess of the expected cost burden of cap-and-trade is significant, ranging from about 3 to 11 percent of the total revenue for PG&E, 8 to more than 20 percent (in the early years) for SCE, and 3 to 8 percent for SDG&E. This does not come close to equaling the above market RPS costs that ratepayers will pay. However, it is reasonable to use this excess revenue to offset a portion of the GHG reduction costs associated with early investment in renewable resources. This is consistent with ARB’s reasoning for free allocation in excess of the expected cost burden. DRA supports the use of GHG revenue to mitigate some of the above market renewable costs. This does not change the fact that the most effective way to educate customers about California’s aggressive GHG reduction and renewable policies is with an annual off-the-bill rebate²¹ and transparent carbon pricing.

Table 6. Potential GHG Costs versus Potential GHG Revenues (Millions \$; Synapse Mid Case CO2 Prices)

	2013	2014	2015	2016	2017	2018	2019	2020
PG&E								
GHG Costs	\$366	\$399	\$456	\$513	\$583	\$650	\$739	\$735
GHG Revenues	\$480	\$564	\$630	\$713	\$819	\$891	\$980	\$1,064
Expected Revenue for DA/CCA Customers	\$48	\$56	\$63	\$71	\$82	\$89	\$98	\$106
Expected Revenue for CFP and Admin Costs	\$48	\$56	\$63	\$71	\$82	\$89	\$98	\$106
Potential Revenue in Excess of Expected Costs	\$18	\$52	\$49	\$57	\$73	\$62	\$44	\$116
Potential Revenue in Excess of Expected Costs (%) ¹	3.7%	9.2%	7.7%	8.0%	8.9%	7.0%	4.5%	10.9%
SCE								
GHG Costs			\$445	\$507	\$610	\$681	\$722	\$796
GHG Revenues	\$627	\$718	\$825	\$889	\$913	\$988	\$1,061	\$1,161
Expected Revenue for DA/CCA Customers	\$80	\$91	\$105	\$113	\$116	\$125	\$135	\$147
Expected Revenue for CFP and Admin Costs	\$63	\$72	\$82	\$89	\$91	\$99	\$106	\$116
Potential Revenue in Excess of Expected Costs			\$192	\$180	\$96	\$83	\$98	\$102
Potential Revenue in Excess of Expected Costs (%) ¹			23.3%	20.3%	10.5%	8.4%	9.2%	8.8%
SDG&E								
GHG Costs	\$94	\$100	\$117	\$131	\$148	\$171	\$186	\$205
GHG Revenues	\$133	\$149	\$169	\$193	\$219	\$240	\$262	\$288
Expected Revenue for DA/CCA Customers	\$20	\$22	\$25	\$29	\$33	\$36	\$39	\$43
Expected Revenue for CFP and Admin Costs	\$13	\$15	\$17	\$19	\$22	\$24	\$26	\$29
Potential Revenue in Excess of Expected Costs	\$6	\$12	\$9	\$13	\$16	\$9	\$10	\$11
Potential Revenue in Excess of Expected Costs (%) ¹	4.6%	8.1%	5.5%	6.9%	7.3%	3.5%	4.0%	3.8%

¹ As a percentage of GHG Revenue

²¹ The off-the-bill rebate would be sent to customers annually, separate from electricity bills, and with educational materials explaining the benefits of cap-and-trade and reducing GHG emissions.

B. The Commission could coordinate implementation of the Consolidated Financing Program with R.09-11-014 or implement it in this rulemaking.

During the November 2, 2011 workshop in which parties presented their proposal to use the GHG allowance revenue for the benefit of customers, DRA stated that legislation might be necessary to establish its proposed Consolidated Financing Program. However, since that time, DRA has had discussions with the California Advanced Energy and Alternative Transportation Authority (CAEATFA), a department of the California Treasury, and now believes that CAEATFA could implement an energy efficiency financing program through a combination of contracts with the Commission and the Utilities.

Assembly Bill (AB) X1 14²² directs CAEATFA to establish a Clean Energy Upgrade Program for financing energy efficiency improvements. Currently, it is anticipated that CAEATFA will provide a loan loss reserve of \$25 million, which CAEATFA hopes will encourage participating financial institutions to offer up to \$250 million in loans at reasonably low interest rates for energy efficiency improvements, water efficiency improvements, the installation of distributed generation renewable energy sources and the installation of electric vehicle charging infrastructure.²³ Thus, CAEATFA is already implementing a program that includes energy efficiency financing, although at a level far lower than needed to achieve optimal levels of energy efficiency and GHG reductions.²⁴

DRA recommended in Rulemaking (R.)09-11-14 to Examine the Commission's Post 2008 Energy Efficiency Policies, Programs, Evaluation, Measurement, and Verification and Related Issues that the Commission establish a Consolidated Financing Program in the service territories of the Utilities by executing a contract with CAEATFA to be the program administrator, and that the Commission allocate a minimum of \$150 million annually to the

²² AB X1 14 was enacted August 2, 2011 and is currently set to sunset January 1, 2015.

²³ AB X1 14, Public Resources Code Section 26130; *see also* http://www.treasurer.ca.gov/caeatfa/abx1_14/information.asp.

²⁴ Energy Efficiency Financing in California: Needs and Gaps Preliminary Assessment and Recommendations, Harcourt Brown & Carey, Inc, July 8, 2011, (Energy Efficiency Financing in California), p. 4 and Appendix C. Available at http://www.cpuc.ca.gov/NR/rdonlyres/B0EBFCA6-22B5-408D-96B8-6490A5A38939/0/EEFinanceReport_final.pdf.

program for the next five years.²⁵ One hundred million dollars would be for residential and small business financing, while \$50 million would be for industrial, agricultural and larger commercial customers.

DRA recommended in R.09-11-014 that CAEATFA be tasked with leveraging this \$150 million in ratepayer capital, working with financial institutions that would in turn provide the funding for residential and small business building retrofit projects through a variety of financing mechanisms, as well as financing for industrial, agricultural and larger commercial customers. While industrial, agricultural and larger commercial customers may be currently eligible to participate in utility on-bill financing programs, such programs do not leverage private capital. DRA believes leveraging ratepayer capital with private capital several-fold should be a necessary condition of any financing program, as this is the most effective way to expand the resources available to the energy efficiency marketplace.²⁶

“Energy Efficiency Financing in California: Needs and Gaps Preliminary Assessment and Recommendations,”²⁷ prepared under the direction of the Energy Division, would serve as a starting point from which CAEATFA can work with stakeholders to develop suitable mechanisms to increase the flow of private capital. These stakeholders include, but are not limited to, the financial industry, local governments, non-profit affordable housing organizations, and energy service companies (particularly those that are interested in “Energy as a Service” (EaaS) business models targeting the residential and small business market space).

CAEATFA is well-suited to take on this responsibility and could provide the Commission with an immediate option to move forward on energy efficiency financing. CAEATFA was established by legislation²⁸ and has broad authority to enter into contracts with

²⁵ The Division of Ratepayer Advocates’ Opening Comments in Response to Assigned Commissioner’s Ruling and Scoping Memo Regarding 2013-2014 Bridge Portfolios and Post-Bridge Planning, Phase IV, filed November 8, 2011 in R.09-11-014 (DRA Bridge Portfolio Comments), pp. 2-5.

²⁶ DRA Bridge Portfolio Comments, pp. 2-5.

²⁷ Energy Efficiency Financing in California: Needs and Gaps Preliminary Assessment and Recommendations, Harcourt Brown & Carey, Inc, July 8, 2011, (Energy Efficiency Financing in California), p. 4 and Appendix C. Available at http://www.cpuc.ca.gov/NR/rdonlyres/B0EBFCA6-22B5-408D-96B8-6490A5A38939/0/EEFinanceReport_final.pdf.

²⁸ Public Resources Code §26000 et seq.

public and private entities,²⁹ and receive grants and loans³⁰ as well as the broad authority to employ a host of financing mechanisms to leverage public monies with private capital. The “financial assistance” that CAEATFA is authorized to use includes:

“any combination, of the following:

- 1) Loans, loan loss reserves, interest rate reductions, proceeds of bonds issued by the authority, insurance, guarantees or other credit enhancements or liquidity facilities, contributions of money, property, labor, or other items of value, or any combination thereof, as determined by, and approved by the resolution of, the board.
- (2) Any other type of assistance the authority determines is appropriate.”³¹

CAEAFTA’s expertise and experience is in working with the financial industry to facilitate its participation in clean energy markets.³² CAEATFA is overseen by a board that includes the State Treasurer (who serves as chair), the State Controller, the Director of Finance, and representatives from the Public Utilities Commission and the Energy Commission. Thus, an oversight board is already in place.

The contract with CAEATFA regarding operation of the Consolidated Financing Program would be negotiated and overseen by the Commission, with additional contracts between the Utilities (acting jointly) and CAEATFA for payment of program expenses, similar to the current arrangement between the California Center for Sustainable Energy and San Diego Gas and Electric Company, which is the program administrator for the California Solar Initiative

²⁹ Public Resources Code § 26011(e) provides that CAEATFA may contract with a person, partnership, association, corporation or public agency” with respect to a project authorized by CAEATFA.

³⁰ Public Resources Code § 26040(a) provides that CAEATFA may “receive and utilize grants or loans from the federal government, a public agency, or any other source for carrying out the purposes of this division.

³¹ Public Resources Code §26003(e)(1)-(2).

³² Examples of programs administered by CAEAFTA include: Senate Bill (SB) 71, which provides sales and use tax exemptions for manufacturers that produce clean energy products; SB 77, which provides assistance in the development of PACE bond resource programs to aid local jurisdictions in financing distributed generation of renewables, energy efficiency and water efficiency improvements; Qualified Energy Conservation Bonds, which are designed to provide low interest financing to promote alternative energy and energy efficiency in state, local, tribal facilities. CAEATFA’s role here is to be a conduit to bridge the borrower and the bond purchaser in the creation of these Qualified Energy Conservation Bonds

in SDG&E's service territory.³³ The release of ratepayer funds from the Utilities to CAEATFA would be pursuant to the terms of the contract. The full Commission could delegate to the Assigned Commissioner on energy efficiency the authority to negotiate and execute the agreement with CAEATFA, consistent with Commission directives, including direction that the Utilities pay CAEATFA for transactions within the scope of the contract.

Ideally, the Commission would adopt the Consolidated Financing Program recommended by DRA in R.09-11-014 within a timeframe that would allow the Commission in the current GHG rulemaking to direct the Utilities to fund the Consolidated Financing Program with additional GHG revenue. If the schedule of R.09-11-014 makes such coordination with this proceeding infeasible, or if the Commission adopts a different energy efficiency financing model, the Commission should nevertheless implement the Consolidated Financing Program in this proceeding, using the funds shown in Table 7. Using the highest administrative costs³⁴ under DRA's proposal (i.e. annual off-the-bill rebates each year 2013-2020) the total GHG revenue available for the CFP would be \$1.42 billion. If all customers opted-in to an annual on the bill credit after the first compliance period (i.e. the lowest administrative costs under DRA's proposal) the amount available for the CFP would be about \$48 million more.³⁵ Having this known source of funding through 2020 would send a market signal for investment in energy efficiency and would be a valuable tool for raising capital in the private markets.

³³ <http://energycenter.org/index.php/incentive-programs/california-solar-initiative>

³⁴ Data Responses: PG&E_GreenhouseGasOIR_DR_DRA_002; R.11-03-012 DRA-SCE-002_Response; Response of SDG&E to DRA-002 (Appended to DRA's October 5, 2011 Proposal as Appendices B1-B3.

³⁵ A year by year breakdown of Table 7 is provided in Appendix C.

**Table 7. Total GHG Revenue for the Consolidated Financing Program
Under DRA's Proposal, 2013-2020 (Millions \$)**

High Admin Costs (i.e. rebates 2013-2020)	
PG&E	\$588.2
SCE	\$671.8
SDG&E	\$162.7
TOTAL	\$1,422.7
Low Admin Costs (i.e. rebates 2013-2014, and annual bill credit 2015-2020)	
PG&E	\$603.9
SCE	\$702.7
SDG&E	\$164.1
TOTAL	\$1,470.7

DRA recognizes that some parties believe the energy efficiency funding should be considered only within the scope of that proceeding. DRA disagrees, and believes that additional revenue beyond that used to directly offset GHG costs (including a portion of above market RPS costs) should be directed toward achieving long-term GHG reductions. Even if the Commission adopts DRA’s recommendation in R.09-11-014 to allocate \$150 million per year for the next five years to finance energy efficiency loans, an amount which would be leveraged for as much as \$1.5 billion per year, that would still fall short of the gap identified by “Energy Efficiency Financing in California: Needs and Gaps Preliminary Assessment and Recommendations.”³⁶

There is therefore a need for more financing to support comprehensive home energy upgrades than DRA’s recommendation in R.09-11-014 could support. In fact, “Energy Efficiency Financing in California: Needs and Gaps Preliminary Assessment and Recommendations,” estimates that:

“to achieve a 25 percent savings level in California’s homes, at a cost of \$7,200 per home, would require an estimated installed cost of approximately \$60 billion. If one assumes that 20% savings could be archived for \$50 billion, it would require an investment of approximately \$8 billion per year (during a seven year period).³⁷

³⁶ Energy Efficiency Financing in California), p. 4 and Appendix C.

³⁷ Energy Efficiency Financing in California, p. 4.

The report also predicts “the total capital need for all commercial sectors (multifamily, small, and large commercial and industrial) to be approximately \$2 billion per year.”³⁸ Rather than providing energy efficiency financing solely through rate increases in the energy efficiency proceeding, the Commission should allocate ten percent of the GHG allowance revenue (less administrative costs) to support energy efficiency upgrades. This is consistent with the Commission’s acknowledgment in D.08-10-037 that “the foundation for success to reduce GHG emissions in the electricity sector is more energy efficiency and further development of renewable energy sources such as wind, solar, geothermal, and biomass.”³⁹

If the Commission adopts DRA’s recommendation to allocate ten percent of the GHG allowance revenue (less administrative costs) to support energy efficiency upgrades, it will need to consider how to allocate loan funds between ratepayer classes and among the Utilities. DRA recommends that the Commission request comments on this issue before issuing a decision.

C. The Commission should direct the Utilities to submit proposals for implementing Customer Education regarding the use of GHG allowance revenue.

DRA’s proposal to return the allowance value to customers whose bills increase because of the cap-and-trade program would provide the Utilities with an opportunity to educate customers about their cap-and-trade bill impacts and ways to mitigate them. The Commission should ensure that the plan to use allowance revenue for the benefit of ratepayers takes advantage of this opportunity, and that the outreach about the cap-and-trade program is leveraged with education and outreach related to other ongoing programs, including energy efficiency, the California Solar Initiative and any other billing changes, such as those related to time variant pricing. Such information should not be limited to customers who receive an annual rebate check.

Customers whose monthly bills increase because of the cap-and-trade program should see a line item on each bill listing the monthly increase and explaining that it is as a result of GHG

³⁸ Energy Efficiency Financing in California, p. 51. Assuming a ten percent loan loss reserve, the cost to ratepayers for such a program would be \$200 million per year.

³⁹ D.08-10-037, p. 6; see also Economic and Allocation Advisory Committee, “Allocating Emissions Allowances Under a Cap-and-Trade Program: Recommendations to the California Air Resources Board and California Environmental Protection Agency,” (EAAC Report) March 2010, p.??

costs for electricity. At the end of the first year of the cap-and-trade program, customers whose bills increased as a result of the cap-and-trade program, should receive the following information, along with their rebate check: the amount of their annual bill increase; the amount of their annual rebate check; an explanation why their bill increased, while other customers' bills (low-income, or with energy usage in Tiers 1 or 2) did not increase; an explanation why they received a rebate, while other customers (low-income, or with energy usage in Tiers 1 or 2) did not receive a rebate; and an explanation of how they can decrease their electric bill and GHG emissions, including through participation in the Consolidated Financing Program.

Customers whose bills did not increase because they are low-income customers or because their usage is in Tiers 1 or 2 should receive information at the end of the first year of the cap-and-trade program about why their bill did not increase and why they are therefore not receiving a rebate for paying higher electricity costs as a result of the cap-and-trade program, along with explanation of how they can decrease their electric bill and GHG emissions, including through participation in the Consolidated Financing Program.

The Commission should direct the Utilities to submit via Advice Letters no later than the second quarter of 2013 the information that they will convey to customers, so that parties can review and the Commission can approve, prior to distribution of the information at the end of 2013.

III. CONCLUSION

Consistent with the goals of AB 32, the Commission should:

- direct the Utilities to return 90 percent of GHG allowance revenue as direct bill relief to mitigate electricity bill impacts while maintaining the price signal in retail electric rates;
- ensure that when the Utilities return allowance revenue to customers, they inform customers about the cap-and-trade program, including steps they can take to reduce their GHG emissions and their electric bill;
- direct 10 percent of the allowance revenue (less administrative and outreach costs related to bill relief) to a Consolidated Financing Program that will operate to remove a significant remaining barrier to energy efficiency; and
- review the proposal that the Commission adopts for use of GHG allowance revenue at the end of the first compliance period to ensure that it is accomplishing the goals of AB 32.

Respectfully submitted,

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