

Cap-and-Trade Program Summary of Vintage 2013 Electrical Distribution Utility Allocated Allowance Value Reports

Purpose

This report summarizes how electrical distribution utilities (EDU) are using the value of allowances allocated to them by the Air Resources Board (ARB). The value of these allocated allowances is referred to as “allocated allowance value,” or, if the allowances have been consigned to auction and sold, “allocated allowance auction proceeds.”¹ For the investor-owned utilities, the report describes how allocated allowance value is expected to be used. For the publicly owned utilities and electrical co-operatives, the report describes how allowance value has been used.

Background

EDUs receive allowance allocations from ARB pursuant to provisions of the Cap-and-Trade Regulation (title 17, California Code of Regulations, sections 95801 *et seq.*) (Regulation).² Per the Regulation, these allowances are to be used for the benefit of ratepayers, consistent with the goals of the California Global Warming Solutions Act of 2006 (Assembly Bill 32, Nuñez, Chapter 488, Statutes of 2006) (AB 32). This first annual report summarizes how EDUs are using the value of their allocated allowances, and focuses on the use of vintage 2013 allowances.

Allowances allocated to EDUs represent almost 60 percent of the Program’s first compliance period (2013–2014) allowance budget. The number of allowances allocated to each EDU is defined by the Regulation, which specifies the total amount to be allocated to all EDUs (section 95870(d)(1)) and the percentage of the total EDU allocation to be allocated to each EDU (Tables 9-3 and 9-3a). The resulting amount to be given to each EDU is shown in the [Annual Allocation to Electrical Distribution Utilities \(EDU\) under the Cap-and-Trade Regulation](#) document.

The Regulation specifies two types of EDUs to be allocated allowances: investor-owned utilities, and other utilities. Investor-owned utilities (IOU) are electric utilities owned by investors and include the largest electric utilities in the State. The Regulation required IOUs to consign all of their vintage 2013 allocated allowances at the five auctions held by ARB between November 2012 and November 2013, inclusive. Senate Bill 1018 (Chapter 39, Statutes of 2012) (SB 1018) and the California Public Utilities Commission (CPUC) together require IOUs to return nearly all of the resulting proceeds to their

¹ Note: Any proceeds resulting from the sale of these EDU and natural gas supplier allowances are distinct from the auction proceeds received by the State from the sale of California-owned allowances that are sold at auction and deposited into the Greenhouse Gas Reduction Fund pursuant to section 16428.8 of the California Government Code.

² http://www.arb.ca.gov/cc/capandtrade/capandtrade/unofficial_c&t_012015.pdf.

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industrial, small business, and residential customers.³ The other EDUs receiving allowance allocations are publicly owned utilities (POU) and electrical co-operatives (co-op). POU's are owned and operated by local governments such as cities, local utility districts, and irrigation districts, while co-ops are owned by their members. The governing boards of POU's and co-ops determine how to use their allocated allowances.

ARB Reporting Requirements and This Summary Report

Each year, EDUs are required to report to ARB by June 30 describing how each EDU utilized the allocated allowances it received for the prior year (see section 95892(e) of the Regulation). For example, for vintage 2013 allowances allocated to EDUs, the report from each EDU was due to ARB by June 30, 2014. Utilities must describe how the allocated allowance value was used,⁴ describe how that use was consistent with the requirements of the Regulation, and identify unspent allocated allowance value.

Because of the timing of CPUC proceedings governing IOU use of allowance value, most of the IOU's vintage 2013 allocated allowance value remained unspent by ARB's June 30, 2014 reporting deadline. As a result, IOU use of allowance value reports submitted to ARB gave an incomplete picture of their use of vintage 2013 allowance value. Therefore, except where otherwise noted, the "IOU Use of Vintage 2013 Allocated Allowance Value" section of this document is based on IOU forecasts on allowance value required to be reported to CPUC.

For POU's and co-ops, this report summarizes the individual EDU reports submitted to ARB in fulfillment of the Regulation's reporting requirements. Because reporting the quantity of allocated allowance auction proceeds each POU or co-op used for each specific purpose could reveal individual EDU allowance acquisition strategies, this report does not include this level of detail. Instead, POU/co-op use of allocated allowance value is summed by dollar amount and general category of use across all of these utilities, and detail for each POU/co-op is provided both on general categories of allocated allowance value use and specific projects that fit within those general categories.

As EDUs report annually on use of allocated allowance value, ARB will issue an annual update on their uses of allocated allowance value.

IOU Use of Vintage 2013 Allocated Allowance Value

There are six IOU's in California: Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), PacifiCorp, Liberty Utilities LLC (formerly CalPeco Electric), and Golden State Water

³ Decision Adopting Cap-and-Trade Greenhouse Gas Allowance Revenue Allocation Methodology for the Investor-Owned Electric Utilities, Decision 12-12-033, issued December 20, 2012, <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M040/K631/40631611.PDF>.

⁴ ARB's request to EDUs in reporting on use of allocated allowance value was to include only the amount of funds which had already been spent by the date of the signature on the form (if used).

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Company (doing business as Bear Valley Electric Service).⁵ PG&E, SCE, and SDG&E are larger than the other three utilities. Together, IOUs sell over two thirds of electricity in the State⁶ and receive over two thirds of the allowances allocated to EDUs. The total value of vintage 2013 allowances which ARB allocated to IOUs was \$776 million.⁷ As shown in Figure 1 below, all of this value, except for a small amount for administration and outreach, will be returned to ratepayers.

SB 1018⁸ mandates that CPUC oversee the return of all IOU allocated allowance auction proceeds to the IOUs' residential, small business, and emissions-intensive, trade-exposed retail customers, except for up to 15 percent for approved clean energy and energy efficiency projects not otherwise funded.⁹ CPUC conducted a series of proceedings to determine how the IOUs should use allocated allowance value within this framework. These proceedings included discussions of how to define small businesses and how to calculate allowance value amounts to be returned to customers in different customer classes.

Because these proceedings were not yet finished in 2013, CPUC did not allow IOUs to begin including Program costs in electricity rates or returning allowance auction proceeds to customers in 2013. Therefore, at the end of 2013, all IOU allowance value from vintage 2013 allocated allowances remained unspent. CPUC directed the IOUs to return half of vintage 2013 allocated allowance value to customers during 2014 and half during 2015. Figure 1 shows the projected use of 2013 EDU allocated allowance value, based on utilities' public forecasts as approved by CPUC.¹⁰ Vintage 2014 allocated allowance auction proceeds were also returned to ratepayers during 2014 and vintage 2015 allocated allowance auction proceeds are being returned during 2015. After 2015, allocated allowance value used during each year will be allocated allowance auction proceeds from that vintage year's allowances.

By June 30, 2014, when vintage 2013 EDU use of allowance value reports were due, IOUs had started providing volumetric¹¹ proceeds returns to residential customers and small businesses, covering outreach and administrative costs, and had provided the first round of semi-annual California Climate Credits to residential customers, together

⁵ Bear Valley Electric Service is much smaller than most utilities, delivering less than a tenth of one percent of electricity in California (see reference in next footnote) and receiving less than 70 allocated allowances per year. Therefore, CPUC has instructed it to return all its allocated allowance value to its customers on a per-kWh basis to minimize administrative costs (CPUC Decision 12-12-033).

⁶ Electricity Consumption Data Management System, California Energy Commission, 2013 data, available at <http://www.ecdms.energy.ca.gov/elecbyutil.aspx>.

⁷ As reported to ARB in vintage 2013 EDU use of allowance value reports.

⁸ Codified in Section 748.5 of the State of California Public Utilities Code.

⁹ No use of vintage 2013 allowance value has been requested by IOUs for clean energy or energy efficiency projects.

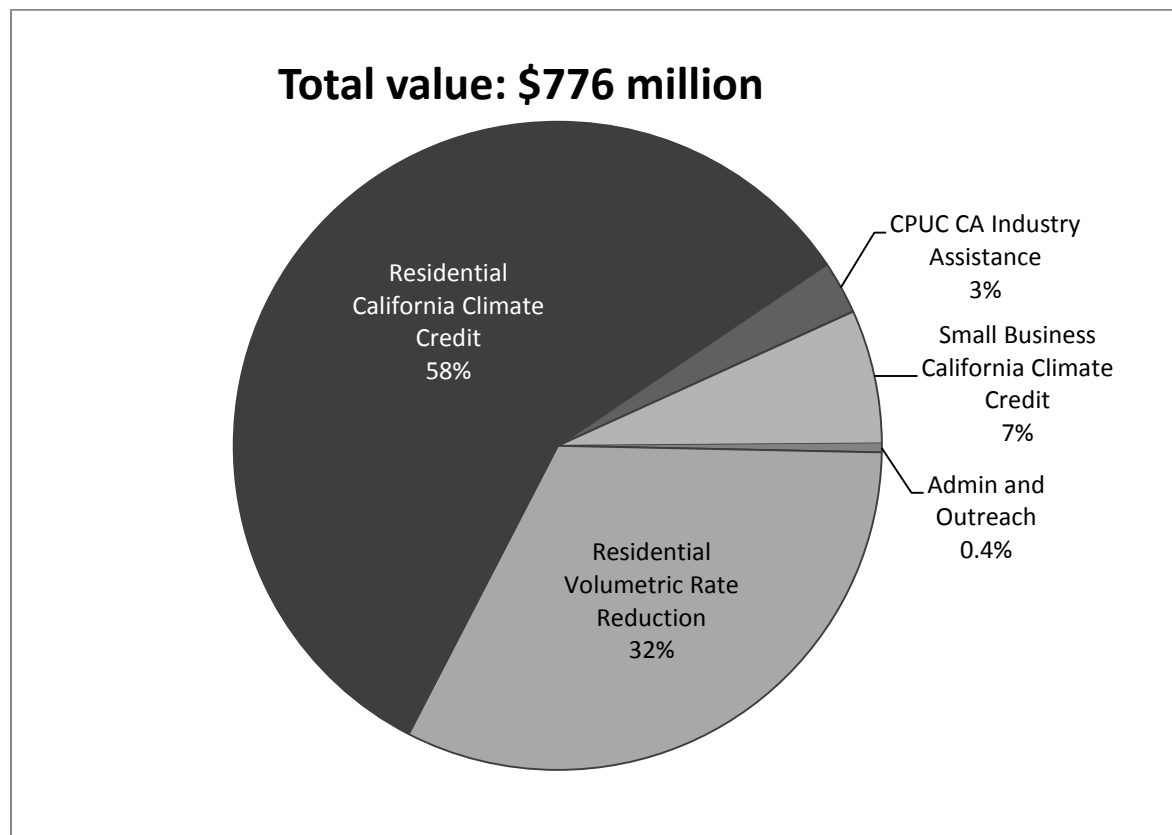
¹⁰ Per CPUC direction to the IOUs, vintage 2013 allowance proceeds spent during 2014 were added to vintage 2014 allowance proceeds and the total amount then divided among categories of allowance value use. A similar procedure was used for 2015. Therefore, the percentage of vintage 2013 allowances used for each category will equal the average of the 2014 percentage and 2015 percentage. Figure 1 shows these averages.

¹¹ "Volumetric" means a constant dollar amount per amount of energy (i.e., dollars per kilowatt-hour).

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representing 20 percent of total 2013 IOU allocated allowance value. The remaining 80 percent of vintage 2013 IOU allocated allowance value will be expended by the end of 2015. Figure 1 shows the total anticipated use of vintage 2013 allocated allowance value required by CPUC. Each category of allowance value use shown in Figure 1 is described below.

Figure 1. IOU expected use of vintage 2013 allocated allowance value.



Residential California Climate Credit

The residential California Climate Credit is a twice-annual bill credit given to all IOU residential customers. All allowance proceeds not used for the other purposes listed below are divided equally among the residential customers of each IOU. The first of these credits appeared on customer bills in April 2014.¹² The residential California Climate Credit amount shown in Figure 1 includes only the value from vintage 2013 allowance proceeds.

Though not shown above in Figure 1, each residential California Climate Credit in 2014 included proceeds from the auction of 2014 allowances as well as 50% of the bill credit value forecasted from the auction of 2013 allowances. In 2015, the residential

¹² For more information, see "California Climate Credit: Savings on Your Electric Bill to Fight Climate Change," CPUC, available at <http://www.cpuc.ca.gov/PUC/energy/capandtrade/climatecredit.htm>.

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California Climate Credit is calculated similarly using the remaining 50% of 2013 bill credit allowance value. After 2015, each IOU's California Climate Credit for a given year will be calculated based on the anticipated proceeds from the auction of that year's allocated allowances.

Residential Volumetric Rate Reduction

The residential volumetric¹³ rate reduction exactly compensates for the rate impacts that the Program would otherwise have on residential customers' rates. The rate reduction is equal to Program-related costs (in \$/kilowatt-hour) that would otherwise be present in residential electricity rates. It was applied to rates starting in April 2014 for SCE and SDG&E and May 2014 for PG&E, coincident with the introduction of Program costs into rates for commercial and industrial customers. It prevented all of the three largest IOUs' residential customers' electricity rates from increasing due to the Cap-and-Trade Program. The residential volumetric rate reduction will end January 1, 2016.

CPUC implemented the residential volumetric rate reduction in response to the disparity between lower-tier and upper-tier electricity rates resulting from statutory limitations on rate increases of lower-usage residential customers. These limitations were lifted in 2013 by Assembly Bill 327 (Chapter 611, Statutes of 2013). In July 2015, CPUC Decision 15-07-001¹⁴ defined a new residential rate structure with smaller differences between lower-tier and upper-tier rates. This decision also determined that the residential volumetric rate reduction will end at the end of 2015. The residential volumetric rate reduction was never applied to PacifiCorp, Liberty Utilities, and Bear Valley Electric Service because these utilities were not subject to the same tier-based limits on rates.

CPUC CA Industry Assistance

CPUC's CA Industry Assistance is an annual bill credit that compensates facilities in emissions-intensive and trade-exposed (EITE) industries for a portion of Program costs associated with the electricity they purchase. CPUC determined that all facilities in industries eligible for industry assistance pursuant to the Regulation should also be eligible for this credit, even if they are smaller facilities that are not covered entities under the Regulation.¹⁵ These industries include petroleum and natural gas extraction; cement, glass, and paper production; petroleum refining; steel manufacturing; and food processing; among others.

CA Industry Assistance has not yet been distributed to EITE facilities to date, but is anticipated by fall 2015. Eligible facilities will receive an allocation of proceeds to address Program costs associated with electricity consumed in 2013 and 2014, as well

¹³ "Volumetric" refers to the fact that the rate reduction is per kilowatt-hour.

¹⁴ Decision on Residential Rate Reform for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company and Transition to Time-of-Use Rates, Decision 15-07-001, issued July 3, 2015, <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M153/K110/153110321.PDF>.

¹⁵ Decision Adopting Greenhouse Gas Allowance Revenue Allocation Formulas and Distribution Methodologies for Emissions-Intensive and Trade-Exposed Customers, Decision 14-12-037, issued December 18, 2014, <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M144/K130/144130487.pdf>.

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as electricity expected to be used in 2015. The amount returned to each facility will be calculated using data submitted by facilities. The amounts for CPUC CA Industry Assistance presented in Figure 1 are forecasts and included to present a more complete picture of anticipated allowance value expenditures.

Small Business California Climate Credit

The small business California Climate Credit is a volumetric on-bill credit that partially compensates for the impacts of the Program on small businesses' electricity bills. CPUC defined a small business as any non-residential customer with a typical energy demand of less than 20 kW per month. This credit began by offsetting 100 percent of the rate increase due to the Program; this percentage will be reduced by 10 percent per year after 2015, since the purpose of the credit is to help small businesses adapt to the inclusion of carbon costs in electricity rates.

Administrative and Outreach Costs

Administrative and outreach costs include the costs of administering the proceeds return and an outreach and education program. A portion of proceeds are used to conduct a broad-based public outreach and education campaign, in partnership with CPUC's larger Energy Upgrade California marketing program, to raise Californians' awareness about state efforts to fight climate change and actions they can take to reduce their energy costs and shift toward cleaner sources of energy.

Clean Energy and Energy Efficiency Projects

SB 1018 allows CPUC to allocate up to 15% of each IOU's allowance proceeds for clean energy or energy efficiency projects. CPUC Decision 14-10-033 developed the procedures by which an IOU may seek approval to use allowance proceeds for a clean energy or energy efficiency project that is not otherwise funded. To date, the CPUC has not approved any specific clean energy or energy efficiency projects to be funded with allocated allowance auction proceeds.

POU and Co-op Use of Vintage 2013 Allocated Allowance Value

There are 45 POU's and four co-ops receiving allowance allocations. Together, these utilities sell just under one third of the State's electricity¹⁶ and receive just under one third of allowances allocated to the electricity sector. Of this electricity, 33% is sold by the Los Angeles Department of Water and Power and 15% is sold by SMUD. The total value of vintage 2013 allowances which ARB allocated to POU's and co-ops is \$373 million.¹⁷ The use of these allowances must benefit ratepayers and be consistent with the goals of AB 32.

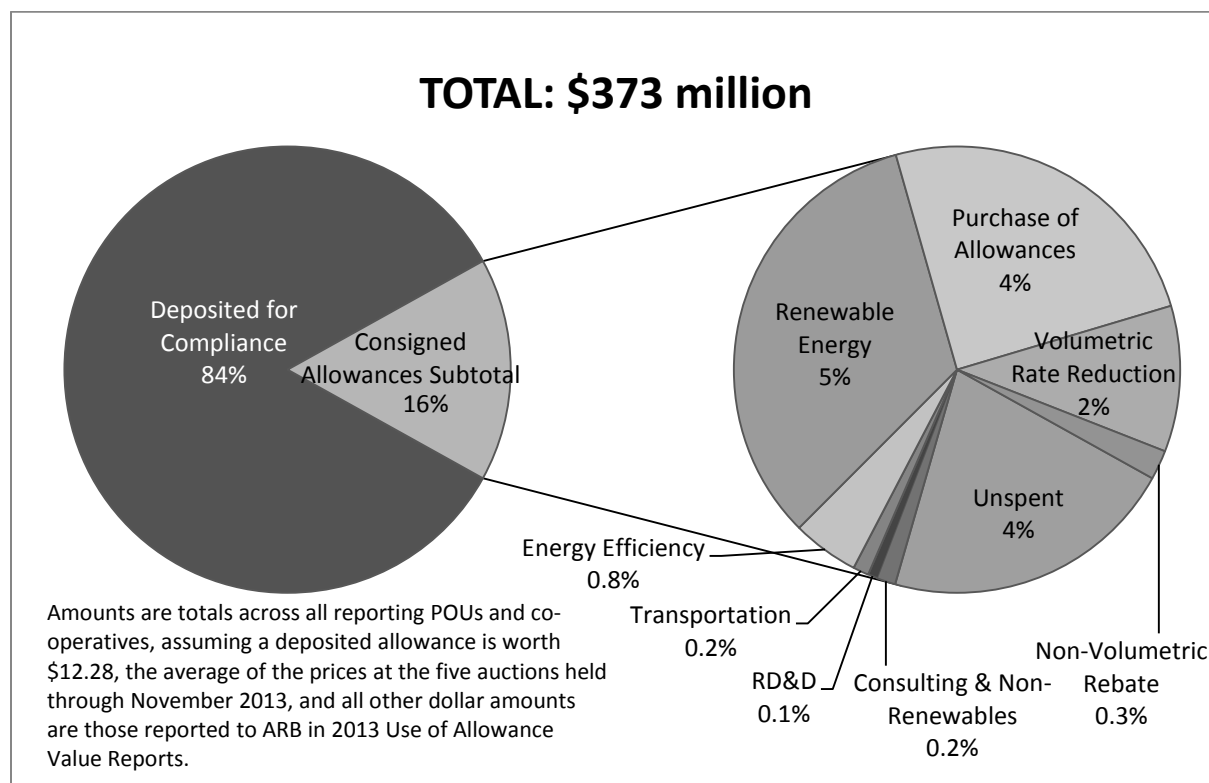
¹⁶ "Electricity Consumption Data Management System," California Energy Commission, 2013 data, available at <http://www.ecdms.energy.ca.gov/elecbyutil.aspx>.

¹⁷ Assuming a deposited allowance is worth \$12.28 (the average of the prices at the five auctions held through November 2013) and relying on auction proceeds amounts reported by the POU's/co-ops to ARB in the vintage 2013 EDU use of allowance value reports.

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POUs and co-ops are not subject to CPUC jurisdiction. Each POU or co-op makes its own decisions about how to use its allocated allowances, subject to Regulation requirements to benefit ratepayers and maintain consistency with AB 32. Figure 2 below shows how POUs and co-ops used their allocated vintage 2013 allowances, totaled across POUs and co-ops, as reported in their vintage 2013 EDU use of allowance value reports. Each allowance can be either deposited for compliance with the Regulation or consigned and sold at auction. The left pie chart in Figure 2 shows how many allowances were deposited for compliance vs. how many were auctioned, and the right pie chart shows how the proceeds from auctioned allowances were used. Table 1 shows the dollar amounts that match the percentages shown in Figure 2.

Figure 2. POU and co-op use of vintage 2013 allocated allowance value.



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Table 1. POU and co-op use of vintage 2013 allocated allowance value.

Use Category	Total Amount Spent
Renewable Energy	\$ 19,911,540
Energy Efficiency	\$ 2,912,396
Transportation	\$ 681,952
Research, Development & Deployment	\$ 411,389
Consulting or Non-Renewable Energy	\$ 816,720
Purchase of Allowances	\$ 14,930,627
Volumetric Rate Reduction	\$ 6,358,692
Non-Volumetric Rebate	\$ 1,279,555
Unspent	\$ 12,878,120
Consigned Allowances Subtotal	\$ 60,180,990
Deposited for Compliance	\$ 312,319,929
Total	\$ 372,500,920

POU and co-op vintage 2013 allocated allowance value has been spent to reduce ratepayer costs, either directly or indirectly. This includes allowances deposited for compliance and allowance value used to purchase allowances, provide customer rebates, purchase renewable energy, and invest in energy efficiency. Of proceeds used for customer rebates, 83 percent (\$6.4 million) was used for volumetric rate decreases. The rest (17%, \$1.3 million) was returned on a per-residential customer or per-business basis. These per-residential customer or per-business rebates are similar to the California Climate Credit given by IOUs. Both the IOU and POU non-volumetric credits/rebates provide a credit to ratepayers without dampening incentives to improve energy efficiency. Less than one percent of allocated allowance value (\$3.9 million) was invested in energy efficiency. Finally, four percent of allocated allowance value (\$13 million) has not yet been spent. Some utilities have not yet used any of their proceeds from selling allowances.

Each use of allocated allowances reported by a POU or co-op is shown in Tables 2a through 2j. All of these tables except Table 2j show the use of allocated allowance auction proceeds, acquired by selling allocated allowances at auction. Table 2j reflects allocated allowances deposited for compliance. Dollar amounts are not shown for individual EDUs because the data could reveal a POU's or co-op's allowance acquisition strategy. This information is also available for [download](#) as a single, sortable table in Microsoft Excel format.

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Table 2 (series). POU and co-op use of vintage 2013 allocated allowance value. This set of tables shows all the ways that POU and co-ops reported using their vintage 2013 allocated allowances.

Table 2a. POU and co-op allocated allowance auction proceeds used for renewable energy.

Utility	Description
City and County of San Francisco	Installing solar PV on municipal buildings.
City of Biggs	Purchasing Renewable Energy Credits.
City of Industry	Purchasing Renewable Energy Credits.
City of Lompoc	Maintenance and upgrades of geothermal power plant.
City of Moreno Valley	Purchasing geothermal and wind energy.
City of Palo Alto	Rebate program for customer-owned solar.
City of Palo Alto	Purchasing renewable energy to meet and exceed Renewable Portfolio Standard requirements.
City of Pasadena	Purchasing renewable energy for all residential and commercial customers.
Modesto Irrigation District	Purchasing renewable energy from specific sources, primarily wind and solar.
Pittsburg Power Company	Purchasing wind energy.
Silicon Valley Power	Purchasing wind energy.
SMUD	Building a digester to produce renewable energy at a dairy.

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Table 2b. POU and co-op allocated allowance auction proceeds used for energy efficiency.

Utility	Description
City of Palo Alto	Rebate program for energy efficiency.
SMUD	Low income residential deep energy retrofits.
SMUD	High school energy efficiency audit training and implementation.
SMUD	Small commercial and non-residential deep energy retrofits.

Table 2c. POU and co-op allocated allowance auction proceeds used for transportation.

Utility	Description
City of Healdsburg	Installing free electric vehicle charging stations.
SMUD	Installing fast electric vehicle chargers.
SMUD	Parking space electrification for diesel vehicles at a truck stop and a refrigeration center.
Stockton Port District	Transporting cargo by barge between Oakland and Stockton.

Table 2d. POU and co-op allocated allowance auction proceeds used for research, development, and deployment.

Utility	Description
Alameda Municipal Power	Pilot program with Opower to encourage residential energy use reduction.
Lassen Municipal Utility District	Researching potential development of renewable energy sources in the utility's service territory.
SMUD	Assessing water system energy saving opportunities and developing projects to demonstrate them.

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Table 2e. POU and co-op allocated allowance auction proceeds used for consulting or non-renewable energy.

Utility	Description
City of Lodi	Consultant assisting the utility with Renewable Portfolio Standard and Cap-and-Trade Program compliance.
City of Lodi	Legal counsel for purchasing solar energy and Southern California Public Power Authority consulting costs related to purchasing solar energy.
Plumas-Sierra Rural Electric Cooperative	Payments for the High Sierra Cogeneration Power Plant.
Surprise Valley Electrification Corp.	Securing letter of credit from Deutsche Bank related to participation in Cap-and-Trade Program market.

Table 2f. POU and co-op allocated allowance auction proceeds used for purchasing allowances.

Utility	Description
Anza Electric Cooperative	Purchasing allowances for generator which supplies electricity to utility.
City of Anaheim	Purchasing allowances for utility.
City of Colton	Purchasing allowances for generator which supplies electricity to utility.
Lassen Municipal Utility District	Purchasing allowances for generator which supplies electricity to utility.
Pittsburg Power Company	Purchasing allowances for generator which supplies electricity to utility.
Redding Electric Utility	Purchasing allowances for utility.
SMUD	Purchasing allowances for utility and purchasing allowances for generator which supplies electricity to utility.
Surprise Valley Electrification Corp.	Purchasing allowances for generator which supplies electricity to utility.

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Table 2g. POU and co-op allocated allowance auction proceeds used for volumetric rate reductions.

Utility	Description
City of Azusa	Volumetric rate reduction for all customers.
City of Shasta Lake	Volumetric rate reduction for all customers. Most goes to industrial customers.
City of Vernon	Volumetric rate reduction for all customers.
City of Victorville	Volumetric rate reduction for all customers. This utility only serves commercial and industrial customers.
Kirkwood Meadows Public Utility District	Volumetric rate reduction for all customers.

Table 2h. POU and co-op allocated allowance auction proceeds used for non-volumetric rebates.

Utility	Description
City of Corona	Per-customer rebates for residential customers, in the form of checks mailed to customers.
City of Roseville	Per-customer rebates for commercial customers.
City of Roseville	Per-customer rebates for residential and low-income residential customers.

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Table 2i. Unspent POU and co-op allocated allowance auction proceeds used for transportation.

Utility	Description
City of Anaheim	Planned for renewable energy costs.
City of Biggs	Planned for Renewable Energy Credits.
City of Healdsburg	Planned for energy efficiency or renewable energy projects.
City of Lodi	Planned for solar energy, LED lighting, other investments in renewable resources or energy efficiency, and/or other programs addressing indirect Renewable Portfolio Standard and Cap-and-Trade Program costs.
City of Roseville	Some planned for advanced metering infrastructure, some planned for low-income energy efficiency rebates, some without plans reported.
City of Ukiah	Planned for local renewable energy projects.
Gridley Electric Utility	Planned for Renewable Energy Credits.
Power & Water Resources Pooling Authority	Planned for renewable resources, energy efficiency, energy storage, water management or efficiency, reducing the carbon intensity of water deliveries, and/or customer rebates.
SMUD	Planned for small commercial deep energy retrofits, dairy digester, fast electric vehicle chargers, and water and energy assessment.
Surprise Valley Electrification Corp.	Planned for replacing utility trucks with more fuel-efficient models.
Truckee Donner Public Utility District	Planned for wind energy project.
Alameda Municipal Power, City of Cerritos, City of Corona, City of Lompoc, City of Oakland, City of Palo Alto, City of Rancho Cucamonga, City of Riverside, City of Victorville, Eastside Power Authority, Hercules Municipal Utility, Turlock Irrigation District, Valley Electric Association	No plans reported for how these funds will be spent.

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Table 2j. POU and co-op allowances deposited for compliance.

Utility	Description
City of Anaheim, City of Azusa, City of Banning, City of Burbank, City of Colton, City of Glendale, City of Needles, City of Pasadena, City of Riverside, City of Roseville, Imperial Irrigation District, Los Angeles Department of Water and Power, Merced Irrigation District, Modesto Irrigation District, Redding Electric Utility, SMUD, Truckee Donner Public Utility District, Turlock Irrigation District, WAPA-Sierra Nevada Region	Deposited at least some allowances for compliance.