

## **Appendix A: Staff Proposal for Allocating Allowances to the Electric Sector**

This document describes the process ARB staff used to gather utility data and the assumptions made in projecting utility resource profiles, explains the proposed method for allocating allowances to the electricity sector, and clarifies which entities are eligible to receive allocations reserved for the electricity sector.

### **BUILDING ON THE PREVIOUS RECOMMENDATION**

Staff's Initial Proposal for 15-day Changes to Address Electricity Sector Allowance Allocation (Appendix 1)<sup>1</sup> was released in December as an appendix to Board Resolution 10-42. Appendix 1 included a number of recommendations to finalize the allowance allocation method for the electricity sector. Below we revisit the recommendations and describe Staff's recent work on Data, Sector Allocation, Allocation to Individual Utilities, Updating, and the Public Process.

#### *Data*

ARB staff recommends working with stakeholders to verify the data needed to evaluate and execute the allowance allocation methods. ARB staff recommends that the dataset developed by the JUG be the starting point for the data work, but that ARB staff independently validate the data and their sources.

Since December staff has recreated the Joint Utility Group (JUG) dataset from publicly available and survey data. Using this data staff has independently validated the accuracy of individual utility data.

#### *Sector Allocation*

The ISOR recommends that a set number of allowances are set aside each year for the electricity sector, starting with the 2012 allocation at 90% of 2008 electricity sector emissions and declining linearly to 85% of that value by 2020. Using the mandatory reporting data, the 2008 emissions from electric generating facilities and imports were 98.9 million metric tons (MMT), so that 90% would be 89 MMT. Additionally, a portion of the electricity produced at facilities that identified themselves as cogeneration facilities was purchased by electricity distribution utilities. Using publicly filed data for 2008 and a heat rate based on the pending PUC QF settlement, the estimated equivalent emissions from QF purchases is 9.67 MMT, so that 90% of this value is 8.7 MMT. The recommended 2012 allowance allocation to the electric sector is therefore 97.7 MMT (89 MMT plus 8.7 MMT). The recommended sector allocation declines linearly to 83 MMT in 2020.

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<sup>1</sup> Appendix 1 may be accessed at:  
<http://www.arb.ca.gov/regact/2010/capandtrade10/res1042app1.pdf>

Staff has made no changes to the apportionment of allowances to the electricity sector. However, the one year delay of compliance obligation will result in fewer allowances being allocated in the first compliance period. Specifically, the total amount of allowances apportioned to the sector will decrease by 97.7 MMT, the amount of allowances scheduled to be allocated in 2012. Reference to the amount of value to be allocated in 2013-2014 may be found in Subarticle 8 of the regulation.

#### *Allocation to Individual Utilities*

ARB staff recommends that the promising allocation methods developed based on the evaluation using preliminary data be refined and evaluated using the final data developed by ARB staff. ARB staff recommends that the method incorporate the three main elements discussed above: ratepayer cost burden; energy efficiency accomplishment; and early action as measured by investments in qualifying renewable resources.

Staff has retained the three primary bases for allowance allocation to individual utilities (cost burden, projected cumulative energy efficiency, and early investment in renewables). Table 9-3 of the discussion draft of the regulation contains the amount of allowances that each utility will receive annually. Table 9-3 may be found in Subarticle 9 of the regulation.

#### *Updating*

ARB staff recommends that allowances be allocated to individual utilities at the start of the program for 2012 to 2020. The allocation will not be automatically updated, so that each utility would know its allocation for the nine-year period and could plan accordingly. If needed, the periodic program review could recommend adjustments to the allocation during the program.

Staff has made no changes to this portion of the recommendation. As shown in Table 9-3 the annual allocation to each utility is predetermined and is not expected to be updating over time, unless it is required due to unforeseen changes in the electric sector.

#### *Public Process*

ARB staff recommends that the process for developing the final method for allocating emission allowances to electricity distribution utilities include at least one public workshop at which the data and methods are reviewed and public comment is received.

Staff intends to hold a public workshop to discuss these and other recommended changes to the regulation in July 15<sup>th</sup>.

## UTILITY DATA

### *Data Gathering*

To allocate allowances to the electricity sector staff gathered a data set that includes estimates of demand, resource mix, projected cumulative energy efficiency, and historical early action for each of the distribution utilities serving California end-use customers.

For the largest Independently Owned Utilities (IOU) and Publicly Owned Utilities (POU) historical and projected resource mixes for 2007-2018 have been previously collected in California Energy Commission (CEC) form S-2, and are publicly available as documentation supporting the 2009 Integrated Energy Policy Report (IEPR).<sup>2</sup> These data include estimates of future load, projected cumulative energy efficiency,<sup>3</sup> early action,<sup>4</sup> and resource mix.<sup>5</sup> For these utilities, 2019-2020 data were imputed holding load growth rates, committed resource levels, and energy efficiency investment fixed at 2018 values.

For those utilities that did not submit long-range S-2 forms (Other Utilities), uniform sources of forecasted load and resource mix were not publicly available. To gather data on the Other Utilities staff prepared a survey soliciting information on historical load and resource mix for the years 2001-2010.<sup>6</sup> From historical data, estimates of total load, large hydroelectric (Output>30MW), nuclear, renewable, coal, and natural gas resource levels for the years 2011-2020 were imputed. Load was estimated taking the 2010 load served and applying a 3% annual growth rate.<sup>7</sup> Baseline levels of committed renewable, nuclear, and coal

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<sup>2</sup> The 2009 IEPR and the publicly available utility S-2 data may be accessed at: [http://www.energy.ca.gov/2009\\_energypolicy/documents/](http://www.energy.ca.gov/2009_energypolicy/documents/)

<sup>3</sup> Cumulative energy efficiency is comprised of utility sponsored industrial, commercial, and residential building and appliance programs.

<sup>4</sup> For the purpose of the allowance allocation to the electricity sector, “early action” is defined as investment in renewables during the period 2007-2011. This includes investment in geothermal, hydroelectric (Output<30MW), solar, wind, and Qualifying Facility (QF) renewable contracts.

<sup>5</sup> In many cases the reported levels of committed resources sum to a quantity less than the projected level of annual load served by a particular utility. In these cases it is assumed that the utility will supplement the projected portfolio of contracted resources with marginal natural gas or unspecified market resources. Thus, *specified* supply is always made to meet load for each utility in each year.

<sup>6</sup> In many cases utilities were not able to report data for all years 2001-2010. In some cases this was because the utilities had not been in existence during the entire period and in other cases it was the result of missing data. In all cases missing data were for the early years of the survey period.

<sup>7</sup> The 3% annual growth rate was determined to be appropriate after staff conducted an analysis of the distribution of historical growth rates amongst the Other Utilities. While the rate is somewhat higher than the average growth rate projected for the utilities submitting long-range S-2 forecasts, Staff believes that it

resources were held constant at 2010 levels for the period 2011-2020. Baseline levels of large hydroelectric resources were calculated as the average of levels for all reported years and held constant during 2011-2020. In all cases, residual load – load net of committed resources – was assumed to be served by marginal natural gas facilities or unspecified market power. Early action was calculated for each utility as the sum of investment in renewables for years 2007-2011. Cumulative energy efficiency was projected to be 2% of annual load.<sup>8</sup> Incorporating these data and assumptions staff was able to construct a uniform data set for the Other Utilities that was similar to that constructed for the larger utilities from the S-2 data reported to the CEC.

Finally, for PacifiCorp, a multijurisdictional utility and electricity marketer with resources located in California and out-of-state, the resource mix for the years 2011-2020 was projected using Mandatory Reporting Regulation (MRR) data for 2008-2010. The methodology used to project the PacifiCorp load, resource mix, and early action credit is exactly similar to the method used for the Other Utilities, with the exception that the growth rate applied to PacifiCorp is 1%, as PacifiCorp's load growth has historically been somewhat ambiguous.

#### *RPS Compliance*

To accurately reflect the expected level of renewable resources utilized by each utility, staff imposed a constraint on all<sup>9</sup> utilities requiring compliance with a 33% Renewable Portfolio Standard (RPS). This constraint begins at 20% compliance in 2012 and increases linearly to 33% in 2020. In cases where the constraint was binding, the utility's resource plan was adjusted to incrementally invest in a sufficient amount of renewables to meet the standard and "lay off" or divest an equivalent amount of natural gas (and then coal) resources to keep supply and load in equilibrium. In cases where the constraint was not binding the utility was assumed to achieve their projected level of renewable resources.

## **ALLOWANCE ALLOCATION**

### *Preferred Method of Allowance Allocation to Electric Utilities*

After reviewing the finalized utility data, ARB staff has identified a preferred method of allocating allowances to the electricity sector that incorporates

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accurately reflects the potential for higher growth from the Other Utilities, which are uniformly smaller and have historically grown more quickly.

<sup>8</sup> Limited projections of future energy efficiency investment by Other Utilities are available. After an analysis of historical energy efficiency investment historically achieved by small and large utilities, staff determined that 2% is an achievable level. This is somewhat lower than larger utilities' average future projected energy efficiency goal of 3% of annual load.

<sup>9</sup> Utilities that receive more than half of their electric load from large hydro are exempted from this constraint. These utilities are Trinity and SFPUC.

ratepayer cost burden, projected cumulative energy efficiency and early investment in qualifying renewable resources during the period 2007-2011. Below is a description of each of the factors contributing to the electricity sector allocation and the fraction of allocation awarded by that criteria.

### *Cost Burden*

A central principle of the allowance allocation to the electricity sector is the incorporation of customer cost burden. Cost burden is expected to result from emissions costs associated with fossil, QF, and non-emitting resources priced at market being passed from generators and marketers to utility customers. Under this proposal, the complete annual expected cost burden for each utility is initially allocated. Expected cost burden is calculated by first assigning an emission factor to each fossil generation resource type and non-emitting resources prices at market.<sup>10</sup> Then an annual emissions profile for each utility is calculated by summing the emissions associated with the reported quantities of each resource type. In this way, each utility can expect to be able to fully compensate their customers for the costs associated with the cap and trade program that are expected to be passed through to customers. Under this proposal nearly 94% of allowances are allocated to defray expected costs.

### *Energy Efficiency*

Energy efficiency is incorporated into the allocation through utilities annual projections of cumulative load reduction. Energy efficiency is assumed to come from decreased demand for natural gas resources, so the quantity reductions are weighted by the emission factor of natural gas. Each utility is awarded 25% of their expected energy efficiency savings. This number was chosen to ensure that at least 1% of allowances could be allocated for energy efficiency achievements. Under this proposal slightly more than 1% of allowances are allocated in recognition of projected energy efficiency.

### *Early Action*

As described above, early action is defined as a utility's investment in qualifying renewable energy during the period 2007-2011. Credit for early action is capped at 25% of a utility's expected cost burden. That is, the share of early action allowances that each utility receives is equal to the lesser of either their share of the total investment in renewables multiplied by the total allowances available for early action or 25% of their expected cost burden. For nearly all utilities this

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<sup>10</sup> Fossil generation emission factors for Bituminous Coal (2143Lbs/MWh), Natural Gas (960Lbs/MWh), Cogeneration (950Lbs/MWh), and Fuel Oils (1500Lbs/MWh) were set equal to average emission factors identified from Mandatory Reporting Regulation (MRR) and Energy Information Administration (EIA) data. Non-emitting resources priced at market were assigned a default emission factor of 960Lbs\MWh.

constrain is non-binding.<sup>11</sup> Under this proposal slightly less than 5% of allowances are allocated in recognition of early action.

*The Recommended Allocation to Individual Utilities*

Below is a table that identifies staff's preferred annual allowance allocation to each electric utility in metric tons of carbon dioxide equivalent. This table corresponds to table 9-3, where the values are expressed as percentages of the total allowances set aside for the electricity sector annually.

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<sup>11</sup> In the case of utilities for which the early action constraint is binding, the "excess" quantity of allowances is redistributed to ALL utilities according to their share of total expected cost burden.

Utility Name	Utility Type (1)	Annual Total Electric Sector Allocation by Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
PG&E	IOU	24899.60721	24737.17971	23942.81196	23635.73471	24056.77068	23285.75619	22985.52007	22511.03739
LADWP	POU	13577.35967	13332.78543	12902.26448	13025.87707	13196.73850	13236.54886	12663.60672	11635.75489
SCE	IOU	32550.86930	31539.94692	31343.30862	29489.10961	26806.65905	25821.15324	24888.63348	24562.76588
SDG&E	IOU	6913.19042	6542.72427	6419.94193	6399.65848	6452.76692	6280.29950	6171.85166	6127.32568
SMUD	POU	3136.87952	3079.82955	2954.67507	2973.79152	3045.56140	3088.47708	3125.02326	3165.01542
City of Anaheim	POU	1988.01660	1994.20096	1948.20823	1980.37547	1956.79768	1968.79623	1955.57978	1954.61171
City of Azusa (Azusa Light & Water)	POU	172.92353	173.82335	173.79283	175.20000	178.13567	178.17283	178.69019	180.59658
City of Banning	POU	93.56675	95.57636	95.13889	96.10240	98.01724	98.20619	98.51252	99.92516
City of Burbank	POU	755.51592	755.02835	752.07208	754.14311	757.38498	758.36086	758.46722	762.01115
City of Cerritos	POU	17.50026	17.74789	17.92537	18.09971	18.51200	18.44809	18.53779	18.59634
City of Colton	POU	234.59860	236.87747	238.57542	239.72435	243.04937	241.88609	242.29232	243.42732
City of Glendale (Glendale Water and Power)	POU	630.36501	622.39965	608.82574	605.95863	610.96464	602.76591	603.21156	612.71273

City of Pasadena (Pasadena Water and Power)	POU	776.73501	771.88409	761.98329	760.27111	756.68595	771.11577	771.46414	778.99657
City of Riverside	POU	1080.50301	1068.15767	1041.99026	1064.94354	1066.17160	1081.36624	1076.07572	1085.43344
City of Vernon	POU	396.64365	395.28866	396.46820	390.91254	392.33733	383.24025	372.34385	361.54297
Imperial Irrigation District	POU	1697.60391	1706.03724	1686.00189	1716.25277	1746.83364	1737.79119	1858.90825	1874.46525
Modesto ID	POU	1210.19363	1205.85275	1172.36582	1177.80688	1189.07257	1171.56633	1157.26242	1160.70803
City of Alameda	POU	51.00105	54.06110	51.22219	55.48847	55.41231	62.84942	62.85157	62.86389
City of Biggs	POU	6.51001	6.84674	6.20499	6.14076	6.48126	6.15579	6.00834	5.96835
City of Gridley	POU	14.52676	14.57651	14.47060	14.45150	14.60510	14.36241	14.00967	13.81680
City of Healdsburg	POU	31.38394	30.61678	28.66951	29.87702	31.43557	32.57575	32.65964	34.48307
City of Lodi	POU	158.83944	157.44383	150.67669	150.79930	153.86132	151.43848	147.50211	148.49310
City of Lompoc	POU	47.35661	46.74445	44.91434	46.24697	47.67332	46.98725	45.84252	46.44796
City of Palo Alto	POU	339.76868	335.24696	321.47037	319.57227	323.77011	316.77805	308.33202	308.91513
City of Redding	POU	427.88169	471.81900	461.03137	460.18457	468.28971	472.20470	461.10657	462.11303
City of Roseville	POU	467.45895	470.99797	468.49114	478.84784	492.11323	474.70409	462.38570	456.69263
City of Ukiah	POU	33.72579	32.72094	29.87464	31.82468	34.33676	36.16148	36.29475	37.07821
Plumas-Sierra Rural Electric	POU	61.44844	61.67687	61.48590	61.08346	61.36864	60.02035	58.45519	57.22036



Cooperation									
Port of Oakland	POU	31.41019	31.46838	31.45937	31.06518	30.93497	30.07588	29.30102	28.53210
Silicon Valley Power	POU	1080.71655	1076.60258	1046.69136	1087.81620	1144.48315	1152.15236	1126.03087	1141.51571
Truckee-Donner Public Utility District	POU	115.84060	116.77977	117.55794	118.06585	119.42207	119.01820	119.23987	119.71075
Turlock Irrigation District	POU	899.59376	912.59231	909.42200	913.70489	932.65094	924.70410	903.52466	899.50027
Anza Electric Cooperative, Inc.	POU	19.43521	19.77627	20.11937	20.21408	20.56049	20.36760	20.42193	20.31183
Bear Valley Electric Service	POU	0.05706	0.05806	0.05907	0.05935	0.06036	0.05980	0.05996	0.05963
City of Needles	POU	9.84410	10.21416	10.58741	10.68913	11.06109	10.84804	10.90332	10.94422
City of Rancho Cucamonga	POU	24.52855	24.95799	25.38979	25.50623	25.94181	25.69238	25.75686	25.80691
City and County of San Francisco	POU	95.16554	109.32986	123.91090	138.94948	154.45283	170.41562	186.84934	200.83890
City of Shasta Lake (Shasta Dam Area Public Utility District)	POU	49.60418	50.36617	50.65478	51.34056	53.04671	52.74120	52.94642	53.79275
Lassen Municipal Utility District	POU	48.67425	49.66427	50.65422	50.94733	51.97625	51.42232	51.57150	51.69829
Merced Irrigation District	POU	163.88634	166.34870	168.42935	169.56338	172.94968	171.62667	172.08246	173.07352
Moreno Valley Utilities	POU	37.66115	38.32139	38.98563	39.16424	39.83010	39.44422	39.54003	39.61399
Mountain Utilities	POU	2.92929	2.98065	3.03232	3.04650	3.09866	3.06944	3.07752	3.06498

Port of Stockton	POU	5.15776	5.24827	5.33933	5.36446	5.45639	5.40520	5.41962	5.39040
Power and Water Resource Pooling Authority	POU	63.55549	64.72482	64.53543	66.34849	70.50656	70.19824	70.69000	72.07431
Sierra Pacific Power Company	POU	216.84819	220.65347	224.48165	225.53841	229.40342	227.25123	227.85747	226.62902
Surprise Valley Electrical Corporation	POU	51.57762	52.48272	53.39325	53.64461	54.56390	54.05200	54.19620	53.90401
Trinity Public Utility District	POU	0.00152	0.00152	0.00152	0.00152	0.00152	0.00152	0.00152	0.00152
WAPA (Sierra)	POU	318.86875	333.94622	349.03970	353.30373	368.72267	360.21350	362.62350	357.79019
Valley Electric Association, Inc.	POU	0.11224	0.11511	0.11800	0.11879	0.12170	0.12007	0.12053	0.11959
Victorville Municipal	POU	22.85691	23.25801	23.66152	23.77290	24.18030	23.95345	24.01735	23.88786
Hercules	POU	6.27814	6.33541	6.32841	6.41360	6.61035	6.59408	6.61688	6.73363
City of Industry	POU	8.72638	8.89269	9.06003	9.10618	9.27494	9.18087	9.20734	9.15352
Corona	POU	57.95314	58.75406	59.34689	59.80144	61.07937	60.68144	60.85687	60.87443
Pittsburg Power/ Island	POU	3.89656	4.03538	4.17256	4.21378	4.35973	4.28185	4.30445	4.26237
Eastside	POU	4.66855	4.90805	5.14942	5.21539	5.45676	5.32118	5.35910	5.28019
PacifiCorp	IOU	731.87858	734.19222	732.35697	741.04556	751.88674	760.51893	767.29440	779.11607

(1) IOU = Investor Owned Electric Utility, POU = Publicly Owned Electric Utility

*Distribution Relative to Cost Burden*

As a matter of policy the approach to allocating allowances to the electric sector has been to ensure that each utilities allocation is at least equal to their customers' total expected cost burden in each year. Below is a table that reports allocation to each utility by year as a percentage of expected customer cost burden. As is easily verified, each utility is expected to receive allocation in excess of their total annual expected cost burden. This is because each utility not only receives an initial allocation of allowances equal to their expected cost burden, but each utility also receives a share of allowances awarded on the basis of projected cumulative energy efficiency and early action.

Utility Name	Utility Type (1)	Annual Allocation in Excess of Expected Ratepayer Cost Burden by Utility							
		2013	2014	2015	2016	2017	2018	2019	2020
PG&E	IOU	6.32372%	5.07286%	2.48283%	3.52492%	5.16830%	6.30135%	6.40242%	8.90797%
LADWP	POU	8.64792%	6.87523%	3.59355%	4.82370%	6.58635%	8.00499%	7.98187%	11.02692%
SCE	IOU	3.89398%	2.99158%	1.08698%	1.89347%	3.08979%	3.88229%	4.12903%	6.44044%
SDG&E	IOU	6.90927%	5.65485%	2.82481%	4.07455%	6.35842%	7.82913%	8.05008%	11.11009%
SMUD	POU	4.49180%	3.89218%	2.30870%	2.81530%	3.59565%	4.18178%	4.14922%	5.37094%
City of Anaheim	POU	10.40192%	8.09440%	3.53562%	5.41445%	8.19020%	9.99746%	9.98418%	13.90046%
City of Azusa (Azusa Light & Water)	POU	1.71413%	1.34594%	0.58648%	0.91102%	1.42592%	1.74042%	1.77150%	2.45732%
City of Banning	POU	2.25102%	1.72312%	0.65579%	1.10899%	1.75572%	2.19085%	2.22420%	3.08765%
City of Burbank	POU	3.21231%	2.37772%	0.82265%	1.46859%	2.40140%	3.02975%	3.07682%	4.31752%
City of Cerritos	POU	1.16026%	0.91507%	0.39653%	0.62758%	0.95845%	1.17118%	1.18765%	1.62868%
City of Colton	POU	2.27501%	1.85033%	1.02553%	1.37746%	1.87039%	2.22907%	2.27087%	2.20540%
City of Glendale (Glendale Water and Power)	POU	1.04636%	0.86514%	0.43352%	0.61610%	0.87559%	1.04968%	1.05362%	1.41172%
City of Pasadena (Pasadena Water and Power)	POU	3.90574%	2.99531%	1.09555%	1.92789%	3.15144%	4.03101%	4.10793%	5.74773%

City of Riverside	POU	2.55106%	2.01115%	0.80991%	1.32672%	2.11206%	2.57520%	2.62154%	3.62351%
City of Vernon	POU	3.63299%	2.79732%	1.03287%	1.78531%	2.93325%	3.64014%	3.73004%	5.24495%
Imperial Irrigation District	POU	0.24289%	0.25287%	0.26885%	0.30280%	0.27879%	0.25181%	0.22718%	0.22755%
Modesto ID	POU	2.12969%	1.63044%	0.62985%	1.06194%	1.68192%	2.11164%	2.01182%	2.79332%
City of Alameda	POU	3.97977%	3.02768%	1.10696%	1.96051%	3.19744%	4.08864%	4.21408%	5.98519%
City of Biggs	POU	25.49739%	25.47703%	17.49658%	25.47981%	25.49956%	25.45258%	25.45687%	25.48146%
City of Gridley	POU	4.33617%	3.07880%	1.11215%	2.09938%	3.37155%	4.52725%	4.72964%	6.86735%
City of Healdsburg	POU	2.86148%	2.14903%	0.73037%	1.34279%	2.23281%	2.87896%	3.01411%	4.36421%
City of Lodi	POU	16.22651%	12.14031%	3.98921%	7.34308%	12.24980%	15.34608%	15.64312%	22.09963%
City of Lompoc	POU	8.52572%	6.39533%	2.18283%	4.07625%	6.83094%	8.91664%	9.37119%	13.62516%
City of Palo Alto	POU	10.25421%	7.66330%	2.51915%	4.65570%	7.82639%	10.26515%	10.77812%	15.68143%
City of Redding	POU	7.33446%	5.56724%	1.97901%	3.60037%	5.98996%	7.82230%	8.21946%	11.91325%
City of Roseville	POU	7.65459%	5.13009%	1.69519%	3.18889%	5.36628%	6.81037%	7.12715%	10.35215%
City of Ukiah	POU	3.85249%	2.89635%	1.05652%	1.81853%	2.90841%	3.77788%	3.94138%	5.64703%
Plumas-Sierra Rural Electric Cooperation	POU	24.54361%	18.06740%	5.75772%	10.64907%	17.76542%	22.16886%	22.61912%	25.26598%
Port of Oakland	POU	1.48036%	1.11815%	0.39680%	0.73599%	1.25035%	1.66767%	1.81142%	2.55560%

Silicon Valley Power	POU	0.17022%	0.16291%	0.15143%	0.17480%	0.19977%	0.21380%	0.22163%	0.25078%
Truckee-Donner Public Utility District	POU	10.91518%	8.12205%	2.74849%	4.84711%	7.82575%	9.96055%	10.41098%	15.08131%
Turlock Irrigation District	POU	0.73754%	0.58762%	0.29385%	0.43733%	0.63823%	0.76529%	0.76606%	1.01546%
Anza Electric Cooperative, Inc.	POU	5.15474%	3.83649%	1.35014%	2.40859%	3.91183%	4.98967%	5.20951%	7.49094%
Bear Valley Electric Service	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%
City of Needles	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%
City of Rancho Cucamonga	POU	0.22362%	0.23933%	0.25356%	0.28947%	0.31053%	0.33606%	0.34676%	0.37731%
City and County of San Francisco	POU	0.04745%	0.04229%	0.03174%	0.03980%	0.05442%	0.06476%	0.06971%	0.09369%
City of Shasta Lake (Shasta Dam Area Public Utility District)	POU	2.63313%	2.34752%	2.11596%	1.94379%	1.81092%	1.69623%	1.59446%	0.04387%
Lassen Municipal Utility District	POU	3.65144%	2.78612%	0.99613%	1.74697%	2.79137%	3.54286%	3.60433%	5.02096%
Merced Irrigation District	POU	0.17420%	0.17341%	0.15538%	0.21460%	0.28327%	0.33458%	0.34167%	0.39172%
Moreno Valley Utilities	POU	1.07666%	0.82479%	0.33914%	0.56170%	0.86249%	1.07308%	1.09282%	1.50215%
Mountain Utilities	POU	0.09073%	0.08785%	0.08048%	0.08808%	0.09525%	0.09818%	0.09511%	0.11181%
Port of Stockton	POU	0.55165%	0.54901%	0.54170%	0.55896%	0.57796%	0.60709%	0.62442%	0.04387%
Power and Water Resource Pooling Authority	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%

Sierra Pacific Power Company	POU	10.69558%	8.12703%	3.54381%	5.35495%	7.76257%	9.69044%	9.84313%	11.56250%
Surprise Valley Electrical Corporation	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%
Trinity Public Utility District	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%
WAPA	POU	1.91229%	1.83806%	1.73599%	1.79419%	1.81542%	1.94224%	1.98773%	0.19696%
Valley Electric Association, Inc.	POU	0.96504%	0.95995%	0.95045%	0.97618%	0.99349%	1.04352%	1.07173%	0.04387%
Victorville Municipal	POU	0.66865%	0.66744%	0.66160%	0.68190%	0.70248%	0.73661%	0.75749%	0.04387%
Hercules	POU	4.23813%	3.18852%	1.13444%	1.99033%	3.19810%	4.05414%	4.13246%	5.77180%
City of Industry	POU	0.72431%	0.72273%	0.71653%	0.73796%	0.75824%	0.79521%	0.81754%	0.04387%
Corona	POU	2.10058%	1.72529%	0.99357%	1.31071%	1.75309%	2.08213%	2.12602%	1.98180%
Pittsburg Power/ Island	POU	1.63294%	1.54224%	1.38766%	1.47144%	1.55046%	1.67865%	1.71885%	0.38580%
Eastside	POU	1.92755%	1.87897%	1.83007%	1.86528%	1.84786%	1.95962%	2.00577%	0.04387%
PacifiCorp	IOU	1.91607%	1.45181%	0.49469%	0.86703%	1.43316%	1.78037%	1.80223%	2.51633%

(1) IOU = Investor Owned Electric Utility, POU = Publicly Owned Electric Utility

## ELIGIBILITY

### *Criteria for Receiving Allowances as Part of the Electricity Sector Allocation*

In order to receive allowances as part of the electricity sector allocation, entities must provide electricity serve end-use customer load and receive payment for that load from end-use customers. Each of the utilities listed in table 9-3 are end-use customer sellers with the required transactional relationship. Generators, marketers, and other providers of electricity that do not have a transactional relationship to end-use customers are not eligible for allowance allocation. This requirement is essential to correctly incorporating the emissions price signal in electricity markets and appropriately compensating electric customers for the costs of the program. If entities without a transactional relationship to consumers are allocated allowances for the benefit of end-use customers their only means of directly defraying the programmatic costs would be reduce prices. This outcome is explicitly NOT the goal of cap and trade.

### *The Water Sector*

In December the Board directed staff to further evaluate the appropriateness of allocating allowances directly to the State Water Project (SWP) and the Metropolitan Water District (Metropolitan). After consideration of the potential benefits and dis-benefits to consumers and the integrity of the program, staff has determined that it is not appropriate to include SWP or Metropolitan in the allocation to the electricity sector. While each of these entities use electricity to transport water into and around California, and the emissions associated with this activity are included in the pool of allowances set aside for the electric sector, staff view the role of these entities as analogues to electricity marketers, and not distribution utilities. As described above, these entities do not maintain direct relationships with the end-use consumers of their projects. Rather, they market water to utilities and intermediaries. As such, allocating directly to these entities could result in either the deterioration of the emissions price signal in the water sector, if they used the value to reduce prices, or lost value for end-use customers, if they used the allowance value for something other than direct compensation, which they are not well positioned to provide to end-users.