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Proposal for Allocating GHG Emissions Targets to POUs

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Joint ARB and CEC Workshop on Greenhouse Gas Emission Reduction Targets for Publicly Owned Utility Integrated Resource Plans
California Energy Commission, Arthur Rosenfeld Room
April 17, 2017

February 23rd Joint Agency Workshop on 2030 Greenhouse Gas Emission Reduction Targets for Integrated Resource Planning

- Part 1: Define an Overall Electric Sector Emissions Target in 2030 for IRP Purposes
- Part 2: Determine a Methodology to Divide the Electric Sector Emissions Reductions Target (Established in Part 1) between the CPUC's and Energy Commission's Respective IRP Processes

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  - **Option A: Use a Methodology Similar to CARB's Allowance Allocation for Electric Distribution Utilities**
  - **Option B: Divide the Electric Sector Target Based on Electric Load Served in 2016**
  - **Option C: Determine a Bottom-Up Methodology for Apportioning the Electric Sector Emissions Reductions Target**

This Workshop/Proposal

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- Part 2: Determine a Methodology to Divide the Electric Sector Emissions Reductions Target (Established in Part 1) between the CPUC's and Energy Commission's Respective IRP Processes
- Part 3: Allocate the "Energy Commission's share" of the sector target to publicly owned utilities that are required under SB 350 to adopt IRPs by January 1, 2019 and submit them to the Energy Commission

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Option B: Divide the Electric Sector Target Based on Electric Load Served in 2016

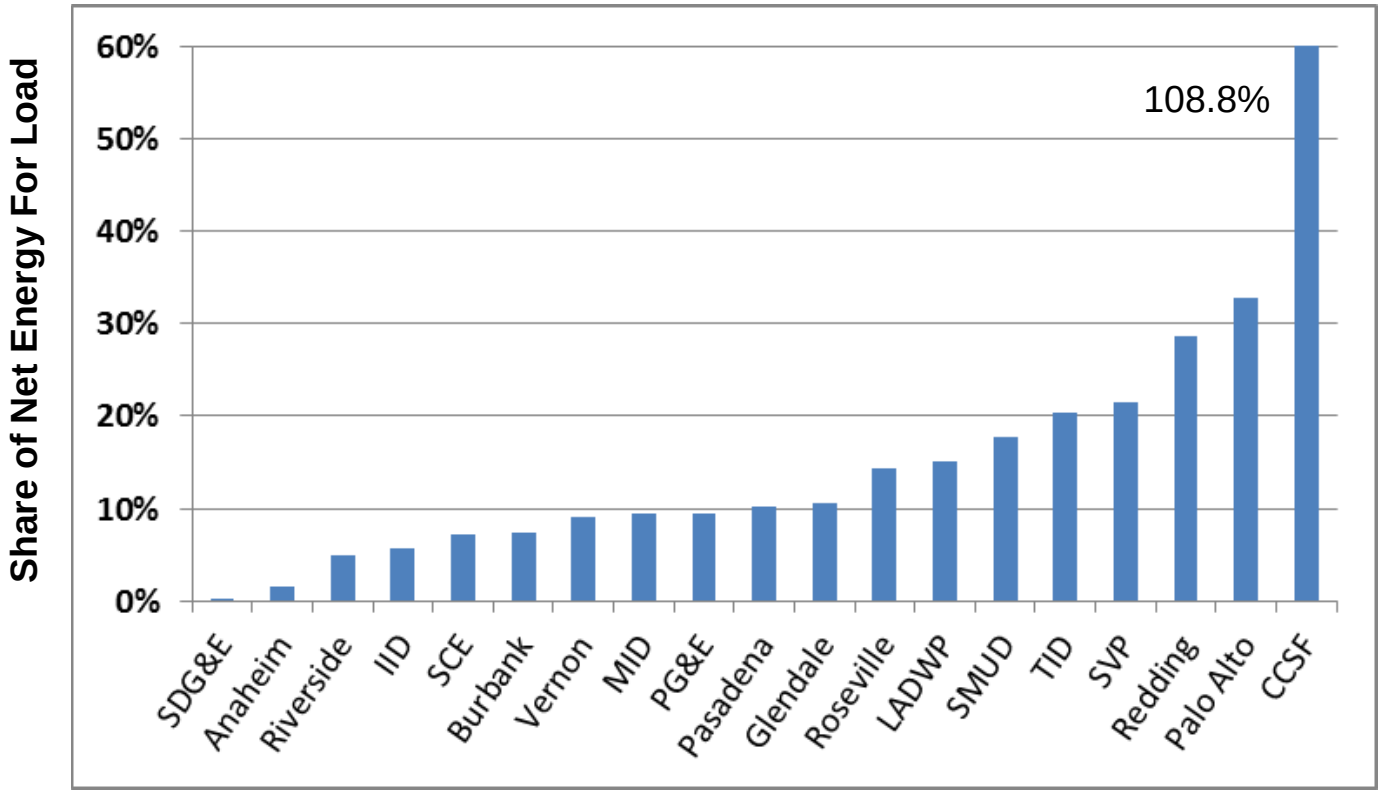
Pros

Transparent, simple.

Cons

Does not account for distribution of non-RPS zero- and low-carbon portfolio resources across POUs

Utilities Differ in their Endowment of Non-RPS Zero-Carbon Resources



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CARB Proposal for Allowance Allocation for Electric Distribution Utilities over 2021 - 2030

For each utility, estimate

- Net energy for load
- Retail Sales (50% RPS energy)
- Non-RPS zero-carbon energy in portfolio

Remaining energy need is assumed to be met with natural gas-fired generation at 0.4354 mt CO_2-e/MWh.

Minimum of 5% of net energy for load assumed to be met with natural gas.

Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation : 2021–2030 Allowance Allocation to Electrical Distribution Utilities; December 21, 2016

CARB Proposal for Allowance Allocation for Electric Distribution Utilities for 2030

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CARB Proposal for Allowance Allocation for Electric Distribution Utilities for 2030

For each utility, estimate

- Net energy for load (CED 2016 – 2026)
- Retail Sales (50% RPS energy) (CED 2016 – 2026)
- Non-RPS zero-carbon energy in portfolio (S-2 filings, 2015 IEPR)

Remaining energy need is assumed to be met with natural gas-fired generation at 0.4354 mt CO_2-e/MWh.

Minimum of 5% of net energy for load assumed to be met with natural gas.

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Advantages

- Aligns individual targets for non-CPUC jurisdictional entities with endowment of non-RPS zero-carbon resources.
- Can be used to assign *percentage* shares of emissions to POUs independent of the sector target, and whether or not there is an initial allocation between CPUC- and non CPUC-jurisdictional entities
- Assigns shares of GHG emissions to non-filing POUs
- Utilizes a vetted methodology and data.

Questions

- Should the 5% “minimum gas” assignment be retained?
- Should the allocations shares be updated to based on the most recent CED forecast and/or the 2017 S-2 filings?
- Are there any (other) modifications to this methodology that are needed?
- Is there another methodology for allocating the (“non-CPUC”) share of the sector target that should be used?

Results Using 2015/2016 Data

	Share of Projected Emissions	Projected Emissions	Share of 52 mmmt (Scoping Plan mid-point)	Share of POU Emissions
Anaheim	1.028%	591,465	534,481	4.512%
Burbank	0.431%	247,733	223,866	1.890%
CCSF	0.045%	59,460	23,395	0.197%
Glendale	0.394%	226,831	204,977	1.730%
IID	1.770%	1,018,334	920,224	7.768%
LADWP	8.824%	5,097,436	4,588,258	38.731%
MID	1.052%	605,225	546,915	4.617%
Palo Alto	0.157%	90,254	81,559	0.688%
Pasdena	0.424%	244,272	220,738	1.863%
Redding	0.176%	101,528	91,746	0.774%
Riverside	0.924%	531,538	480,328	4.055%
Roseville	0.445%	256,081	231,409	1.953%
SMUD	3.529%	2,030,657	1,835,016	15.490%
SVP	0.877%	504,708	456,083	3.850%
TID	0.608%	349,792	316,092	2.668%
Vernon	0.439%	252,781	228,427	1.928%
Totals	**21.122%**	**12,208,095**	**10,983,514**	**92.715%**