



Decarbonization Incentive Rate Financing Proposal

Developed by Local Government Sustainable Energy Coalition and Santa Barbara Clean Energy

Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customers.

Objective of Proposal: Provide Marginal Cost-Based Incentives to Electrify

Concept proposed by Santa Barbara Clean Energy and Local Government Sustainable Energy Coalition





Santa Barbara Clean Energy's Interest

- Single City CCA nimble
- Carbon Neutrality goal by 2035
- 100% Carbon-Free default product
- Almost 20% CARE customers
- High number of renters
- Highly engaged community





Guiding Principles

- In order to meet California's ambitious decarbonization goals, a diverse suite of tools needed to provide implementation pathways to ALL of California's utility customers.
- The grid is getting cleaner providing a pathway to decarbonize major sources of GHG emissions (vehicles and buildings)
- Financing remains the single largest obstacle to building electrification





Solution: Decarbonization Incentive Rate

- Enables customers who switch heating, ventilation and air conditioning or other appliances from natural gas, fossil methane, or propane to electricity to realize a bill benefit by paying a discounted rate on incremental electricity consumed Should be paired with TOB or On-Bill project funding (TECH proposal +)
- Rate could also be offered to customers using electric vehicles.
- California has adopted marginal cost-based electricity rate discounts previously to incentivize beneficial choices.





Issues Addressed by Proposal

- Cost of electrification is significant
- Electrification increases load/demand
- TOB/On-Bill Financing dependent on bill savings
- Traditional TOB/On-Bill can leave ancillary benefits on the table (RA, LCR, demand response)
- Provides economical access to ALL utility customers, including low income





Decarbonization Rate Should Compliment On-Bill Financing programs

Agricultural, Commercial, Industrial, and Residential customers eligible for rate if they participate in applicable investor-owned utility (tariff) on-bill financing or Santa Barbara Clean Energy (SBCE) program.

- Rate could be offered as a separate tariff with measure adoption conditions; incorporated into on-bill financing; or as part of a SBCE line-item credit for customers who adopt qualified measures.
- Rate provides overall utility savings (when gas and electricity costs are combined) needed to justify on-bill financing or tariff-on bill payment for measure implementation
- Projects could also participate in utility/SBCE demand-response programs to achieve additional savings and provide ancillary benefits to load-serving entities, such as resource adequacy.





How it Would Work

CustomerInstallsElectrificationMeasure withTOB

Customer
pays
reduced rate
for added
load, realizes
bill benefits,
enrolls in
LSE program

leverages
installed
technology
for RA, LCR,
DR value

reinvests
value gained
into
electrification
programs





Incremental Load Induced by Decarbonization Would be Eligible for Lower Rates

For bundled Southern California Edison (SCE) customers, average rate would go from 17.62 cents per kilowatt-hour (kWh) to 12.95 cents, 26.5% less. Residential rates would decrease from 22.44 cents to 15.22 cents, 32.2% less.

- Tiered rates pose a significant barrier to electrification and would cause the effective discount to be greater than estimated here.
- These estimates were based on measuring against the average electricity rate but added demand would be charged at the much higher Tier 2 rate. The decarb allowance could be introduced as a new Tier 0 below the current Tier 1.

Incremental electricity use would be determined through regulatory vetted sources:

- Building energy use: California Energy Commission's Title 24 building efficiency and Title 20 appliance standard assumptions, adjusted by climate zone.
- Vehicle energy use: based on average annual vehicle miles traveled in a designated region (e.g., county, city or zip code) as calculated by the California Air Resources Board for use in its EMFAC air quality model or from the Bureau of Automotive Repair Smog Check odometer records





Commission Has Previously Adopted Similar Rates

<u>Economic development rates</u> (EDR) offer a reduction to enterprises considering leaving, moving to or expanding in the state. The rate floor is calculated as the marginal cost of service for distribution and generation plus non-bypassable charges. For SCE and Pacific Gas and Electric Company customers the standard EDR discount is 12%; 30% in designated "enhanced zones."

<u>AG-ICE tariff</u>, offered from 2006 to 2014, provided a discounted line extension cost and limited associated rate escalation to 1.5% a year for 10 years to match forecasted diesel fuel prices. The program led to conversion of 2,000 pump engines in 2006-2007 with commensurate improvements in regional air quality and greenhouse gas (GHG) emission reductions.

- The decarbonization incentive rate (DIR) would use the same principles as EDR. Most importantly, load created by converting from fossil fuels is **new load** that has only been recently—if at all--included in electricity resource and grid planning.
 - **None** of this load should incur legacy costs for past generation investments or procurement nor for past distribution costs. This principle means that these new loads would be exempt from the power cost indifference adjustment (PCIA) stranded asset charge to recover legacy generation costs.
- The California Public Utility Commission (CPUC) ruled in 2007 that non-bypassable charges, such as for public purpose programs, CARE discount funding, Department of Water Resources Bonds, and nuclear decommissioning, must be recovered in full in discounted tariffs such as the EDR rate. This proposal follows that direction and include these charges, except the PCIA as discussed above.





OIR Proper Place for Commission Consideration of Decarbonization Rate

OIR and associated scoping memorandum provides broad latitude to consider Commission-authorized tariff, as a standalone or SBCE pilot in concert with utility-provided platform.

OIR states: "New financing programs may or may not result in lower utility bills for participants but should achieve at least one of the state's clean energy goals by resulting in lower emissions increasing the adoption of clean energy technologies, and/or reducing the use of fossil fueled energy."

EDR and AG-ICE were approved by the Commission in separate utility applications.

The mobile home park utility system conversion program was first initiated by a Western Mobile Home Association petition and then converted into a rulemaking, with significant revenue requirement implications.





Next Steps

- Evaluate funding sources for TOB measures/partner with TECH, IOU or other TOB program proposal
- Perform a rate analysis, finalize pilot decarbonization rate
- Define eligible measures, establish measurement criteria
- Create complimentary LSE programs (DR, etc)
- Evaluate costs of implementation and administration





Thanks!

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