

A Fixed Charge solution that satisfies legal requirements while preempting another attack by the utilities on Local Solar

Utility	CARE (<200% FPL)	FERA (200% to 250% FPL)	All Others (> 250% FPL)
PG&E	\$0	\$5	\$12.77
SCE	\$0	\$5	\$13.94
SDG&E	\$0	\$5	\$18.51

Ben Schwartz Policy Manager Clean Coalition 626-232-7573 mobile ben@clean-coalition.org Josh Plaisted Principal Flagstaff Research 510-459-7970 mobile jplaisted@flagstaffresearch.com

Making Clean Local Energy Accessible Now

15 August 2023



- Webinar recording and slides will be sent to registered attendees within two business days.
- All webinars are archived on cleancoalition.org, under Events.
- Submit questions in the Question pane at any time during the webinar.
 - View varies by operating system and browser.
- Questions will be answered during the Q&A portion of the webinar.
- For other questions, contact Gregory Young Francescato: gregory@clean-coalition.org

😑 😑 🗧 GoToWebinar Control Panel			
 Sharing 			
 Dashboard 			
► Attendees: 1 of 1001 (max) 1			
► Audio			
▶ Webcam			
▼ Questions 1			
Show Answered Questions			
Question Asker			
Tupo anguar bara			
Type answer here			
္သ Send Privately ညရ Send To All			
► Polls			
Handouts: 0 of 5			
► Chat			
Test			
Webinar ID# 796-853-115			
🛞 GoToWebinar			



<u>Mission</u>

To accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise.

100% renewable energy end-game

- 25% local, interconnected within the distribution grid and facilitating resilience without dependence on the transmission grid.
- 75% remote, dependent on the transmission grid for serving loads.

Presenters







Ben Schwartz represents the Clean Coalition in proceedings at the CPUC, focusing on microgrids, interconnection, net energy metering, renewable procurement, rate design, and more. With a background in environmental studies and public policy, he brings valuable insight to the diverse local, state, and national policy work done at the Clean Coalition. Ben is passionate about helping humanity solve the three greatest crises that exist today: climate change, water scarcity, and the lack of clean energy. Ben holds a BA in History of Public Policy and Environmental Studies from UC Santa Barbara.

Josh Plaisted received his MSME at UW Madison's Solar Energy Laboratory in tandem with a certificate in energy analysis and policy. He has over two decades experience in the solar field running product development, systems simulation, and field performance validation from startups to publicly traded multinational corporations. Mr. Plaisted has assisted in the development of regulatory standards and provided guidance and testimony before the CEC and CPUC.



A Fixed Charge solution that satisfies legal requirements while preempting another attack by the utilities on Local Solar

Utility	CARE (<200% FPL)	FERA (200% to 250% FPL)	All Others (> 250% FPL)
PG&E	\$0	\$5	\$12.77
SCE	\$0	\$5	\$13.94
SDG&E	\$0	\$5	\$18.51

Ben Schwartz Policy Manager Clean Coalition 626-232-7573 mobile ben@clean-coalition.org

Making Clean Local Energy Accessible Now

15 August 2023

Utility	CARE (<200% FPL)	FERA (200% to 250% FPL)	All Others (> 250% FPL)
PG&E	\$0	\$5	\$12.77
SCE	\$0	\$5	\$13.94
SDG&E	\$0	\$5	\$18.51

- The Clean Coalition's proposed Fixed Charge is modest and will not burden any ratepayers.
- All low-income ratepayers will save money on their electricity bills each month.
- There are three tiers of Fixed Charges. Lower-income ratepayers will realize greater savings than non-low-income ratepayers.
- This proposal incorporates all the costs included in electricity that are truly "fixed".
 Since rates are primarily collected on a volumetric basis (\$/kWh) very few cost components are fixed.

Clean

Coalition



Proceeding details:

- Track A is creating a residential Fixed Charge.
- Track B is aimed at transitioning rates to closer to real-time rates to unlock demand flexibility.
- The CPUC adopted Guiding Principles for Electric Rate Design and Demand Flexibility.

Summary of other proposals:

- Most of the other Proposals were much higher and included four or more different tiers.
 - 8 of 9 parties proposed Fixed Charges at, or above, \$25 for non-CARE customers.
 - 4 of 9 parties included at least 4 tiers, with one group proposing 10 tiers.
- Other proposals would be harder to implement (likely taking years).
- The Clean Coalition's proposal is both pragmatic and easy-to-implement, compared to other proposals that will require significant changes to the billing system and take years to implement.



- Covers the Marginal Customer Costs (e.g., the minimum bill for NEM customers).
 - No transmission, generation, or public purpose charge components.
- Results in savings for low-income customers on day 1 and a decrease in overall rates.
- Three income tiers based on existing low-income subsidy programs.
 - CARE: California Alternate Rates for Energy (30-35% bill credit)
 - FERA: Family Electric Rate Assistance (18% bill credit)
- CARE customers do not pay any Fixed Charge. FERA customers, of whom there are fewer, still see a savings.
- All other customers pay as much or slightly more than they currently are.

Utility	CARE (<200% FPL)	FERA (200% to 250% FPL)	All Others (> 250% FPL)
PG&E	\$0	\$5	\$12.77
SCE	\$0	\$5	\$13.94
SDG&E	\$0	\$5	\$18.51



- Redistributes the cost of existing minimum bills without increasing the total amount of money being collected from ratepayers.
- This is similar to the way CAISO collects Transmission Access Charges (TAC). Each Participating Transmission Owner has a set Transmission Revenue Requirement. However, that is modified based on gross load to determine the final TAC rate.





A Fixed Charge is not the silver bullet solution that will solve the crisis of unaffordable electricity rates in California. Reducing rates is only a temporary respite if the utilities continue to request rate increases that outpace inflation.

- Prices are high and low-income customers are not the only ones struggling to make ends meet in California. There are millions of renters, historically disenfranchised groups, and residents located in disadvantaged communities that could see bill increases from a high Fixed Charge.
- A one-time rate reduction will not solve the underlying causes of increasing rates.
- PG&E raised rates by 9% earlier this year and could increase rates by as much as 32% by 2026.
- SDG&E is proposing an 8% rate increase for this year.
- Imposing a high Fixed Charge will have significant unintended consequences.

Other issues to consider that are related to rates include:

- Energy consumption patterns
- Sustainable growth of Local Solar
- Electrification/Decarbonization
- GHG reduction and environmental justice
- Affordability

Cost drivers leading to increases in electricity rates



- Transmission: \$30 billion over 20-years and \$9 billion for 2023-2024.
- Wildfire Mitigation Costs: PG&E was granted over \$1 billion (for 2023).
- Wildfire Victim Payouts: So far for payouts to victims in 2015, 2017, and 2018 PG&E has paid \$10 billion and is expected to pay a further \$8 billion.
- Wildfire Insurance Costs: This cost is getting so high (>\$1 billion/year) that SCE has chosen so self-insure.
- Undergrounding: PG&E's cost to underground 10,000 miles will likely be close to \$25 billion.
- Legacy Generation & Nuclear Decommissioning Costs

Manufacture		Real costs, discounted for initiation		
Nominal costs		Discount rate	2.19%	
Asset value capital cost (\$100 base)	\$100	Asset value capital cost (\$100 base)	\$100	
Return	\$197	Return, discounted	\$140	
O&M	\$631	O&M, discounted	\$296	
Total nominal ratepayer cost per \$100 investment (50 years)	\$928	Total discounted (real) ratepayer cost per \$100 investment (50 years)	\$536	

Real costs, discounted for inflation

In nominal dollars, total lifetime ratepayer cost is nearly 10x the initial capital cost; O&M accounts for 68% of this because it increases much faster than inflation. In real dollars (constant value dollars, accounting for inflation), the total lifetime cost is 5x the initial capital cost, and O&M accounts for 55% of this.



Average TAC Rate (over the last 11-years)

What is the value of volumetric rates?

- The cost of delivering energy to end users changes throughout the day.
- Time-differentiated prices send signals to consumers about when to use energy.
- Volumetric rates incentivize conservation, efficiency, and self-generation.
- There are unique location-specific costs and locational value that distributed generation can provide.
- Volumetric rates are essential to enable system decarbonization and electrification.



Clean

Coalition

Table 6: Annual Average Hourly Avoided Value of Electricity in Fresno at Noon and 7 pm.

Hour	GHG &	Energy	Generation	T&D	Total
	Rebalancing		Capacity	Capacity	Levelized
			0.41	12 I 100	Value ⁴⁹
Noon	-\$0.64	\$17.65	\$0.00	\$0.00	\$28.33
7 pm	\$65.25	\$115.84	\$27.08	\$34.65	\$296.43
Difference	-\$65.90	-\$98.19	-\$27.08	-\$34.65	-\$268.10
(Noon – 7 pm)	8				

Making Clean Local Energy Accessible Now

12

Case Study: CAISO-interconnected solar on the alltime peak usage day (6 September 2022)



No Reduction of Peak Transmission Usage from Remotely-Generated Solar on 6 September 2022, CAISO's all-time highest transmission usage day



Local Solar is extremely valuable to the grid





Reduction of Peak Transmission Usage from Local Solar

- Local Solar reduces Peak Transmission Usage by close to 50% of the installed capacity. The effect is 1. amplified by energy storage.
- Bringing down the peak with distributed generation and demand flexibility will reduce transmission 2. investments, saving ratepayers hundreds of billions of dollars over the next two decades.
- Reducing the Peak Transmission Usage by around 10% is enough to prevent most major outages. 3.

Conservation, intelligent uses of energy, and long-term rate reform



- We are moving toward a world of electrification, smart appliances, and demand response.
- Sending price signal that effectively incentivize consumers to use energy during off peak times is critical to ensuring that we do not overinvest in transmission infrastructure.
- Not all consumers will be able to shift usage, but even a small percentage of them will make a big different.
- High Fixed Charges do not fit in with the transition that California is making to more dynamic (and eventually real-time) rates.





Any Questions?

Utility	CARE (<200% FPL)	FERA (200% to 250% FPL)	All Others (> 250% FPL)
PG&E	\$0	\$5	\$12.77
SCE	\$0	\$5	\$13.94
SDG&E	\$0	\$5	\$18.51