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Date: January 20, 2023

Witness: Ben Schwartz

PREPARED DIRECT TESTIMONY OF BEN SCHWARTZ ON BEHALF OF THE CLEAN COALITION

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I. INTRODUCTION

Pursuant to Commissioner Reynolds' Scoping Memo, the Clean Coalition submits this testimony reviewing the Green Tariff for the Investor-Owned Utilities ("IOUs") and proposing a Feed-in-Tariff ("FIT") model for a more streamlined and efficient Green Tariff.

II. STATEMENT OF QUALIFICATIONS

Q: Please state your name, position, and business address for the record.

A: My name is Ben Schwartz. I am policy manager for the Clean Coalition, a 501(c)(3) non-profit. My business address is 1800 Garden Street, Santa Barbara, CA 93101.

Q: Please describe your professional background.

A: I graduated from UCSB 2020 with a b.a. in History of Public Policy and Environmental Studies. I began my work with the Clean Coalition before graduating from university, starting full time as a policy associate in the summer of 2020 and receiving the title of Policy Manager during the winter of 2020. I oversee all of the Clean Coalition's regulatory work the Clean Coalition and have intervened on behalf of the Clean Coalition at the California Independent System Operator ("CAISO"), the California Air Resources Board ("CARB"), the California Public Utilities Commission (the "Commission"), the California Energy Commission ("CEC"), and the Federal Energy Regulatory Commission ("FERC").

Q: On whose behalf are you testifying in this proceeding.

A: I am testifying on behalf of the Clean Coalition. The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement and interconnection of distributed energy resources ("DER") — such as local renewables, demand response, and energy storage — and we establish market mechanisms that realize the full potential of integrating these solutions for optimized economic, environmental, and resilience benefits. The Clean Coalition also collaborates with utilities, municipalities, property owners, and other stakeholders to create near-term deployment opportunities that prove the unparalleled benefits of local renewables and other DER.

Q: Have you previously testified on behalf of the Clean Coalition before the California Public Utilities Commission?

A: Yes, I have testified before the California Public Utilities Commission previously, during the proceeding on developing Net Energy Metering ("NEM") Successor Tariff,

R. 20-08-020.

Q: Are the statements made in your testimony true and correct to the best of your knowledge and belief?

A: Yes, they are.

Q: To the extent that this submitted testimony contains any opinions, do they represent your best judgement as a professional?

A: Yes.

Q: Do you have anything further to state for the record?

A: No, this concludes my statement of qualifications.

III. REVIEW OF THE EXISTING GREEN TARIFF PROGRAMS

Q: What are the existing Green Tariff programs?

A: There are three programs, the Disadvantaged Communities Green Tariff ("DAC-GT"), the Community Solar Green Tariff ("CS-GT"), and the Green Tariff Shared Renewables ("GT-SR"). Within the GT-SR program, there is both an Enhanced Community Renewables ("ECR") component as well as the Green Rate.

Q: Do these three programs effectively attract [low-income] customers to subscribe, while also properly compensating developers for deploying projects?

A: The current Green Tariff programs are indicative of the state's struggles to build a robust Community Solar market. Without an effective program that provides developers with enough certainty that a potential project that meets all the relevant program criteria will result in a deployed project, the result is what currently exists— a group of programs that have not historically resulted in nearly enough completed projects to come close to reaching the state mandated procurement targets. There are four fundamental problems with the current process. The **first** has to do with the semi-annual RFO process used to select projects. The RFO process is expensive, slow, risky, and often delayed by many rounds of proposals, evaluation, negotiation, and approvals. This uncertainty makes it difficult for potential vendors to develop a business use case and/or consider allocating a significant portion of company resources toward deploying Community Solar projects. Simply having a cost-competitive bid in an RFO does not necessarily equate to success and being selected for one stage will not necessarily result in a project being deployed in a timely fashion. Currently, only 1 in 10 RFP-selected projects in the state ever end up being deployed, a fact that can be attributed to other roadblocks, such as the interconnection process. To increase the pace of Community-scale distributed deployments, Clean Coalition recommends using a streamlined procurement method, a Feed-In-Tarff (FIT), to simplify

the value offerings for potential applicants.

Second, the sheer number and variation of existing Green Tariff programs available are overly complicated and make it less likely that both developers and ratepayers will be interested in the programs. As mentioned in the answer to the last question, there are three different Green Tariff programs, two of which focus on disadvantaged communities and one general Green Tariff Shared Renewables program (with two sub programs). Each of the three IOUs administer all three programs, but that is not the case with all of the CCAs. Some have both DAC Green Tariff programs, while others only have one. The result is general confusion amongst potential participants. There is a complete lack of uniformity amongst the number of programs, deadlines, and even the names of the programs. The figure below shows the "rebranding and renaming" the IOUs have done to the Green Tariff Programs.

Tariff Pages and Rate Information	Program Page and Marketing Name
PG&E	
Green Tariff Residential	Solar Choice
Green Tariff Small Business	Solar Choice
Enhanced Community Renewables Residential	Regional Renewable Choice
Enhanced Community Renewables Small Business	Regional Renewable Choice
SCE	
Green Tariff Residential	Green Rate
Green Tariff Small Business	Green Rate
Enhanced Community Renewables Residential	Community Renewables
Enhanced Community Renewables Small Business	Community Renewables
SDG&E	
Green Tariff Residential	EcoChoice
Green Tariff Small Business.	EcoChoice
Enhanced Community Renewables Residential	EcoShare
Enhanced Community Renewables Small Business	EcoShare

Note that each IOU has a different name for its Green Tariff programs. Similarly, some CCAs have their own program names; for example, Clean Power Alliance ("CPA") uses the name PowerShare. For developers, these unnecessary program naming differences are just another roadblock to participating in GT programs throughout the state. On the other hand, from the ratepayer perspective, the amount of research it takes to find the Green

Tariffs and understand the program differences is often more than enough to dissuade many potential subscribers. Program administrators need to have uniform program names to make it simple for any interested party to get involved, whether that is a potential subscriber or a developer. As I will discuss later in this testimony, the value offerings of all three programs can be achieved through one FIT with appropriate adders to value DAC-participation and other benefits.

Third, customer subscription rates in relation to actual deployed capacity has been an issue since the inception of the Green Tariff programs. Up until 2019, the GT-SR program only had around 30 MW of contracted energy and zero MW of deployed capacity. There was— and still is— an issue with deploying new resources at an efficient pace. On the other hand, customer demand for Green Rates is on the rise.[1] In D. 21-12-036, the Commission chided PG&E for far oversubscribing the GT-SR program without also having a sufficient amount of deployed capacity to match that demand, resulting in a temporary usage of RPS-contracted resources to satisfy the GT-SR 'green' requirement. The new Green Tariff needs the flexibility of a FIT with market responsive pricing, which will balance the number of new subscribers with the rate of resource deployment and adjust prices accordingly. Ideally, the program administrator will be responsible for matching finding new subscribers to match the installed capacity, streamlining the process for the developer and simplifying the accounting process easier for all parties.

Fourth, the program needs dedicated interconnection policies, to ensure that the modified Green Tariff does not fall into the same pitfalls that previous wholesale-distributed generation ("WDG") programs in California have. Projects should qualify for Fast Track interconnection and energy storage deployments should be encouraged to maximize the value of solar, via appropriate price signals.

By incorporating these changes, the state can craft a Community Solar program that promotes equity, by incentivizing participation by ratepayers living in DACs, while also streamlining procurement so it is easier for developers to install new capacity (particularly in DACs).

IV. CLEAN COALITION'S FEED-IN-TARIFF PROPOSAL

Q: What structure do you recommend for a more effective Green Tariff?

A: Clean Coalition proposes a Feed-in-Tariff ("FIT") with market responsive pricing and a dispatchability adder to promote local deployments that contribute to community-resilience and maximize the value of renewable energy to the electric grid.

[1] *A Modern Cinderella Story: Assessing the state of California's community-scale renewable energy market*, Tam Hunt (GPI), 2020

Q: What is a FIT?

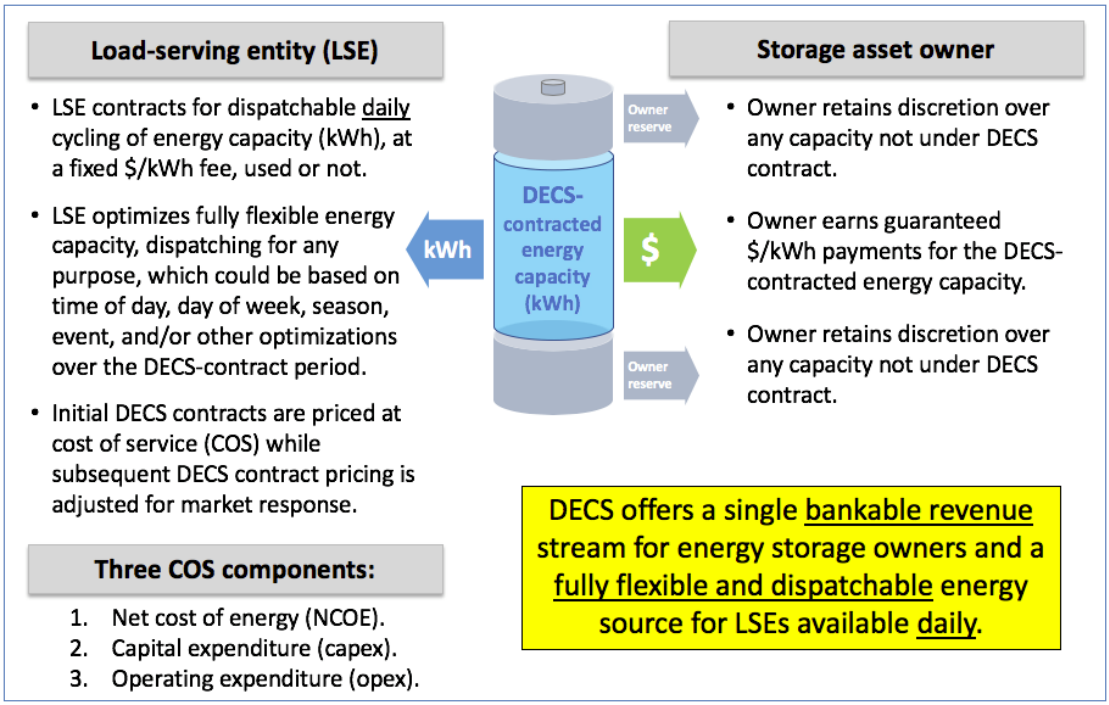
A: A FIT is a standardized, long-term, guaranteed contract that allows smaller local renewable energy projects to sell power to the local utility or other load-serving entity (LSE). Market-based, cost-effective FITs with streamlined interconnection allow local businesses, residents, and organizations to install clean local energy projects in underutilized spaces such as rooftops, parking lots, parking structures.[2]

Q: What makes a FIT more effective than the traditional bi-annual RFO process?

A: The standardized contracts and prices of FITs can be approved in a single decision — compared to the many rounds of proposals, evaluation, negotiation, and approvals that delay auctions — saving both time and money. A FIT is determinative process that provides the developer with certainty that projects that meet the eligibility criteria will swiftly be approved for procurement.

Q: What other features do you recommend for a Green Tariff FIT?

A: In order to procure resources that promote reliability (and resilience), the Clean Coalition recommends including a dispatchability adder- a fixed ¢/kilowatt-hour (kWh) bonus on top of the FIT rate, that offers a value for the Dispatchable Energy Capacity Services (DECS) provided by solar+storage.



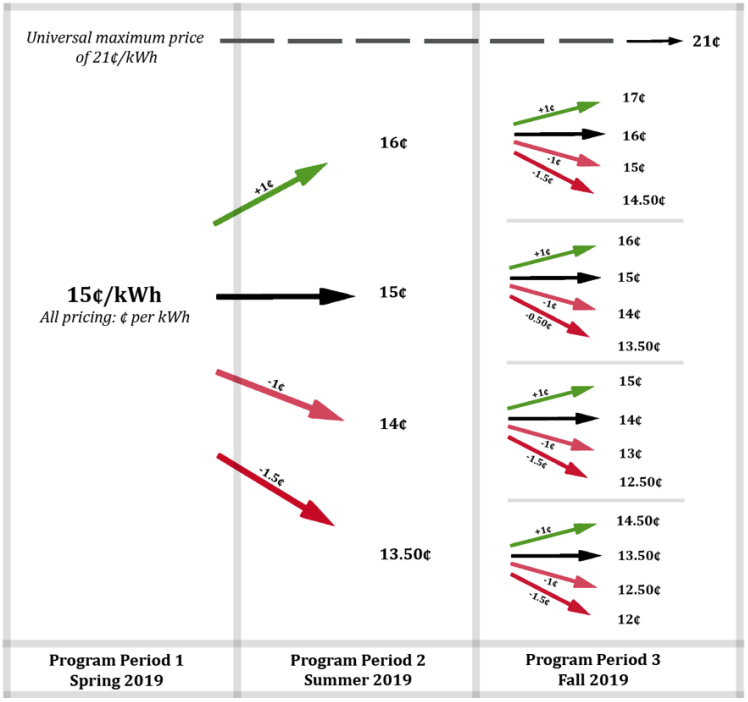
Dispatchable Energy Capacity Services (DECS)

[2] This new FIT will align perfectly with the SB 43 (Becker), which aims to deploy solar canopies on parking lots throughout the state.

Through a DECS contract, an LSE will pay for a guaranteed daily cycling of energy capacity. If the battery owner has on-site loads to meet on a daily basis, a DECS contract might be structured to only reserve a portion of the daily discharge of the battery (as can be seen in the gray portions of the battery in the figure above) for the LSE, with an increased percentage being made available during days on which the grid is expected to have reliability issues. Alternately, a DECS contract might allow an LSE to have complete control over the full cycle of discharge, despite customer ownership of the resource. Importantly, the structure of a FIT that is paired with a DECS contract allows an LSE to be agnostic about which side of the utility meter resources are deployed on.

Q: What other features do you recommend for a FIT?

A: The Clean Coalition designs FITs to include Market Responsive Pricing ("MRP"), which allows the price paid under the FIT for both solar and storage to adjust based on market response (subscriber and developer), ensuring that the LSE pays the optimal price for clean local energy. For example, if a FIT using MRP for its Dispatchability Adder allows the first 1.5 MWh of capacity to contract at a starting fixed price, then if the first 1.5 MWh tranche fills quickly with projects, the price paid for the following 1.5 MWh tranche is reduced by a predetermined adjustment. If, on the other hand, the first 1.5 MWh of available capacity is not procured within the planned time frame, then the fixed price adjusts upward by a predetermined increment after a set period for the subsequent tranche.



MRP baseline for the Dispatchability Adder

Q: Do you have any examples of FITs that have been designed this way?

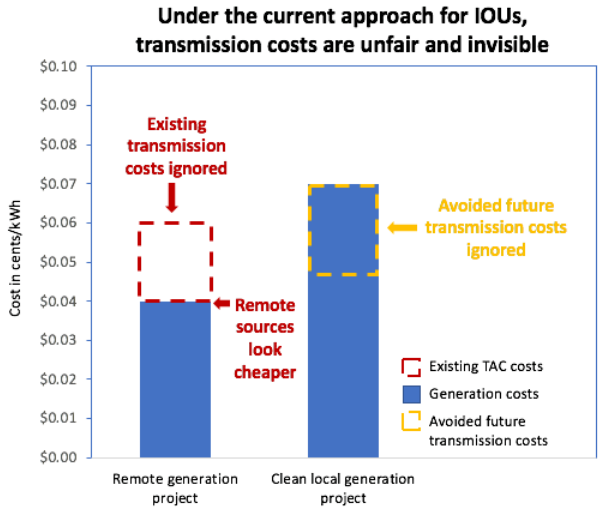
A: Yes, there are two that come to mind. First, in 2019 the Clean Coalition designed a FIT with streamlined interconnection that includes a Dispatchability Adder and MRP for the City of San Diego, which can serve as a model for a statewide GT FIT.[3] The price paid under the FIT for both solar and storage adjusts based on market response, ensuring that the LSE pays the optimal price for clean local energy. The design also proposes a number of adders that could incentive specific deployments, including a DAC (locational) adder. Second, Los Angeles Department of Water and Power ("LADWP") has implemented their FIT+ program, for solar and storage deployments that also improve local reliability. The FIT+ program uses a flat rate combined with Time of Delivery ("TOD") and seasonal multipliers, compensating behind-the-meter ("BTM") solar and energy storage (that can be located on either side of the customer meter). We support the use of updated TOD multipliers (perhaps based on ACC values).

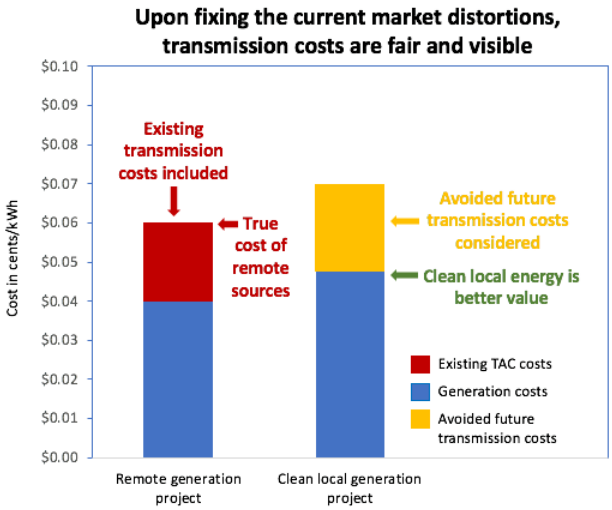
Q: Are there any components that should be excluded from the proposed FIT rate?

A: The PCIA should be excluded from any FIT rate because these are projects deployed onto the distribution grid, on the utility side of the meter (front-of-meter, or "FOM"). As a result, deployments and customer subscriptions do not reduce the amount of grid energy that a specific site will be using. The customer's demand for energy does not change, the only thing that changes is where the energy serving the load originates. As a result of distribution-level deployments, there is less need for transmission-interconnected energy, reducing line losses, congestion, and wear and tear on the transmission-infrastructure. In addition, ratepayers on the GT FIT-rate should not be assessed transmission access charges ("TAC"), which are assessed at the customer meter to collect historical transmission costs.

Unlike remotely generated electricity, locally generated electricity does not require construction of a massive transmission network to move electricity from source to customer. In fact, the closer a generation source is located next to where that energy is used, the less infrastructure is needed, and the less expense is incurred. When this major advantage is priced into the total cost of energy, clean local energy is much more competitive — and actually less expensive in many cases:

[3] https://clean-coalition.org/wp-content/uploads/2019/09/San-Diego-Final-FIT-Design-Recommendations-31_wb-9-Sep-2019.pdf





Existing transmission costs, assessed as TAC and currently averaging 2¢/kWh, should be added to the cost of remote generation that requires use of the transmission grid to get energy from where it is generated to where it is used, which is almost always on the distribution grid where people live and work. Future transmission investments, currently averaging 2.5¢/kWh in the evenings, can be avoided via dispatchable local generation, and that value should reduce the evaluated cost of local generation. When correctly considering ratepayer impacts of transmission costs, dispatchable local generation provides an average of 4.5¢/kWh of better value to ratepayers than is currently assumed in the majority of instances.

TAC currently steal 2¢/kWh from clean local energy projects — artificially inflating the cost of this energy and needlessly crippling an industry that has the potential to drive economic development for every community in the state. TAC pay for existing (and past) transmission infrastructure, which clean local energy does not use, but clean local energy projects also provide value by avoiding future transmission needs. This value is partially reflected in the Avoided Cost Calculator (ACC) used by Commission to value clean local energy projects. Based on an April 2020 CPUC decision, at least a portion of transmission costs will finally be accurately assessed to reflect their true exorbitant costs to ratepayers — specifically, the elements in yellow in the charts above that represent avoided future costs of transmission that would be needed to accommodate forecasted load growth on the transmission grid (measured in MW of peak load).[4]

V. Conclusion

Q: Do you have anything else to say?

A: Yes, only that we appreciate the opportunity to submit this review of the GT and the Clean Coalition's proposed FIT.

[4] D. 20-04-010