BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Resources Future.	Rulemaking 21-06-017 Filed June 24, 2021

CLEAN COALITION OPENING COMMENTS IN RESPONSE TO ORDER INSTITUING RULEMAKING TO MODERNIZE THE ELECTRIC GRID FOR A HIGH DISTIRBUTED ENERGY RESOURCES FUTURE

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I. INTRODUCTION

Pursuant to Rule 6.2 of the Rules of Practice and procedure of the California Public Utilities Commission ("the Commission"), the Clean Coalition respectfully submits these opening comments in response to the Order Instituting Rulemaking to Modernize the Electric Grid for a High Distributed Resources Future, issued in the above captioned proceeding on June 24, 2021. The Clean Coalition appreciates the initiative the Commission is taking to streamline the distribution planning process ("DPP") and more broadly consider how to optimize a two-way grid as the number of distributed energy resources ("DER") deployed across the state increases. Prior to R. 21-06-017, the Integrated Distributed Energy Resources ("IDER")[1] proceeding and the Distribution Resources Planning ("DRP")[2] proceeding, which provide an important foundation for this proceeding, have produced a number of tools that are integral to the modern DPP, including the Avoided Cost Calculator, the Distribution Deferral framework, ICA maps, and key principles to guide decision making. These are necessary components of a larger framework that governs the way that DER are valued and used, one that is just being developed. A single centralized proceeding is the bold step forward necessary to unite the Commission's various DER initiatives, thereby ensuring each program or regulation is developed within the context of a long-term DER plan for the state. The Clean Coalition supports the diverse range of topics listed in the OIR and offers the following recommendations:

- The DPP should have an expanded range of options to meet grid needs based on the solutions that provide the greatest long-term benefits to electrical system.
- The proceeding should consider all different business models that could enable a DSO.
- Track 1 should also consider the most efficient mechanisms to procure DER.

[1] R. 14-10-003
[2] R. 14-08-013

- This is an appropriate venue to consider the way that Transmission Access Charges are assessed to DER.
- The planning process needs to include a Community Microgrid development framework.

II. DESCRIPTION OF PARTY

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.

III. Comments

a. The DPP should have an expanded range of options to meet grid needs based on the solutions that provide the greatest long-term benefits to electrical system.

The current Distribution Planning Process creates a false dichotomy between traditional infrastructure upgrades and DER Deferral (via the DIDF) as the only two options available when a distribution upgrade is necessary. However, as the number of installed DER increase, it becomes increasingly relevant that the Commission creates a framework to identify one of a myriad of tailor-made solutions to address distribution planning issues. For example, projects with a shorter timeline and smaller cost cap are much more compatible with DER aggregations or energy efficiency measures than a more expensive traditional infrastructure solution. Moreover, energy efficiency measures or voltage regulation devices are good short-term solutions, especially in preparation for a long-term solution such as the deployment of a Community Microgrid. On the other hand, a traditional infrastructure solution is most appropriate in a location where all of the nearby feeders are reaching hosting capacity limits or a new substation is needed.

A DER framework should factor in secondary policy considerations in addition to traditional cost-effectiveness tests. Achieving state goals such as electrification and

decarbonization must be a part of the DPP, as should striving for greater equity and environmental social justice outcomes. Therefore, even if it costs slightly more than a traditional infrastructure upgrade, deferring the upgrade using DER has added value it the solution is being deployed in a low-income or disadvantaged community that has a very low penetration of DER. In other words, the Commission should use this proceeding to create a holistic approach to grid modernization that balances the traditional planning process with factors that are not currently considered in the DIDF or ACC, such as resilience or land use benefits.

b. The proceeding should consider all different business models that could enable a DSO.

A Distribution Service Operator (DSO) would operate and maintain each distribution area separate from a transmission operator, providing reliable real-time distribution services at a granular level without also owning the electrical infrastructure. A DSO model eliminates any financial incentive to upgrade existing infrastructure or create new poles and wires solely for the return on investment. Such a DSO might be completely independent, or the IOUs could act as DSO. However, given the latter scenario, the IOUs would need to divest from their distribution assets (or transmission assets), potentially by giving local agencies the option to purchase distribution grid assets within their jurisdiction from the relevant IOU. The utilities are already positioned to functions as DSOs, considering they perform many of the functions that a DSO would as distribution operators. Transitioning to such a system by divesting distribution assets would help the IOUs transition to a business model for the future by removing the inherent conflict of interest present in infrastructure upgrades and focusing on distributed generation.

A DSO would be a neutral arbiter, creating an open and accessible market to foster the competitive development of Distributed Energy Resources (DER) by coordinating distributed generation coming into the grid. DER benefit the entire distribution grid, allowing for greater capacity through a combination of energy storage, demand response, and energy efficiency measures. In a DSO-driven market, any facility can both a consumer and a producer, giving ratepayers better choices and services. The priority would be to ensure that any resource that meets market demands and prices is developed; a local distribution owner could implement a Feed-In Tariff or other method of pricing to rapidly deploy renewable resources. These locally sited clean energy projects developed within the distribution grid, reducing the need for off-site large-scale

generation and keeping the benefits within the community. As more clean energy is deployed, rates and programs will accurately reflect the benefits associated with distributed energy. The proceeding should include a process

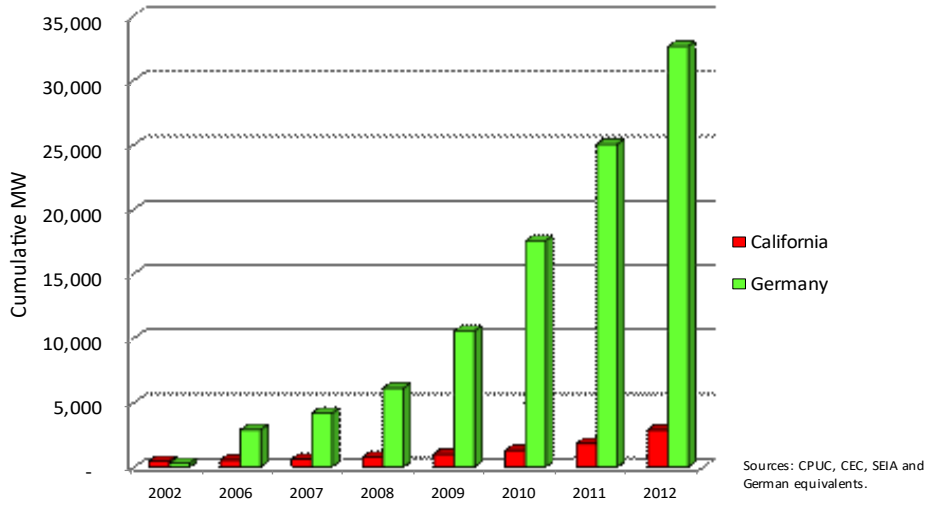
c. Track 1 should also consider the most efficient mechanisms to procure DER.

The Feed-In Tariff (FIT) is the most effective mechanism to procure DER; it limits uncertainty and the cost of market entry as compared to a typical RFP process. Germany has mastered the use of FITs and has unleashed the WDG market as a result. The study should consider the German model.

The FOM (WDG) market unleashed solar in Germany

Clean Coalition

Solar markets: Germany vs California (RPS + CSI + other)



Germany deployed over 10 times more solar capacity than California, **almost entirely on built environments**, in the decade starting 2002, despite California having 70% better solar resource.

Making Clean Local Energy Accessible Now 4

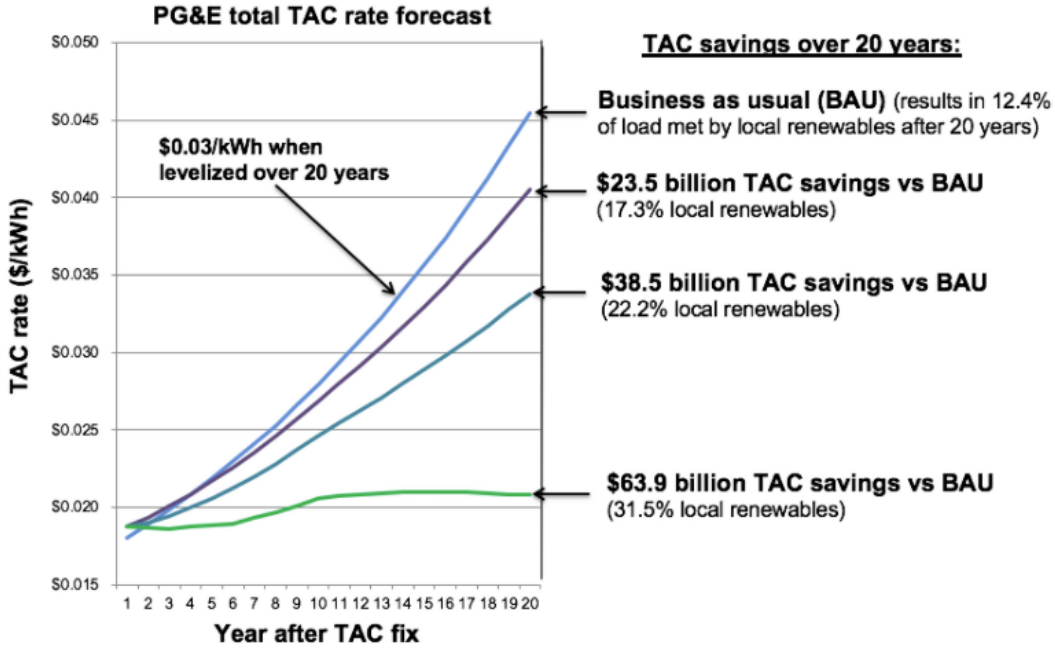
d. The proceeding should consider ways that DER deployment can reduce Transmission Access Charges.

Because distribution planning encompasses more than addressing immediate infrastructure needs — and also includes preparing for buildout based on load growth, achieving state policy goals, greenhouse gas reduction, achieving resilience/reliance, and effectively siting DER — cost-effectiveness is important, but it should not be the sole consideration during distribution

planning. The Commission's main focus should be optimizing the grid to maximize the long-term value to the ratepayers as the grid transitions to manage an increasing load of DER. This requires a mindset that if utilized properly, strategic deployments of DER have the potential to lower costs throughout the electrical system, to the benefit of the ratepayers. Although this proceeding is focused on distribution planning, there are two direct connections to the transmission system:

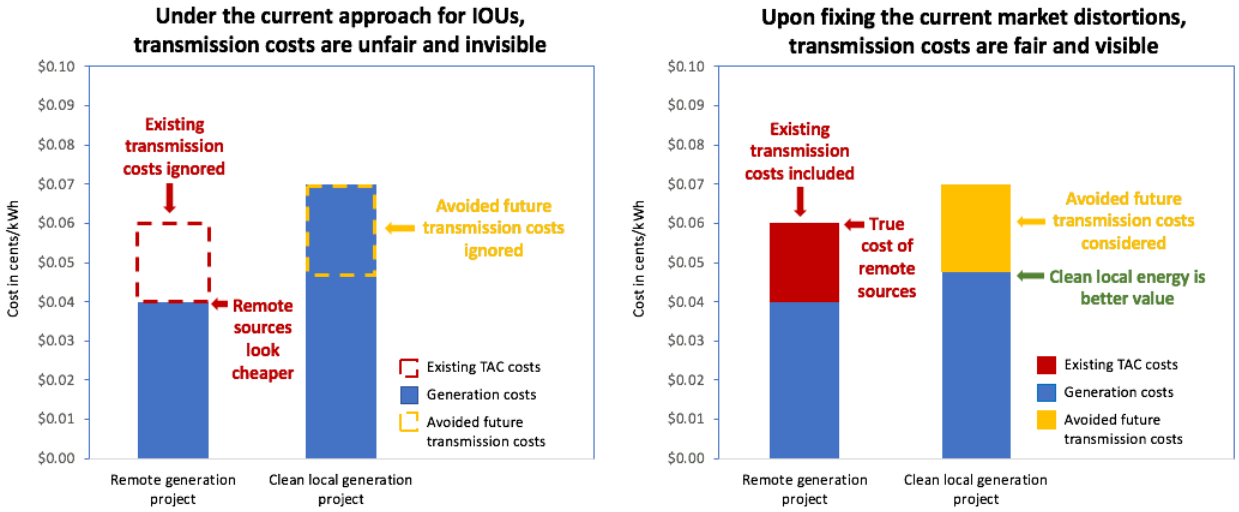
1. Installed DER have value from avoided transmission.
2. The assessment of Transmission Access Charges is suppressing the value of DER.

In 2016, the CAISO Board of Governors acknowledged the role that DER can play in avoided transmission buildout, which was proven to be correct during the years 2017 and 2018, when Californians saved $2.6 billion in avoided transmission costs, primarily through energy efficiency measures and other DER.[3] As demonstrated by the figure below, an increased penetration of DER can result in significant Transmission Access Charges ("TAC") savings of between $20 billion and $64 billion over the next 20 years depending on the amount of focused investment made in local renewables.



[3] https://www.utilitydive.com/news/efficiency-ders-saving-26b-in-avoided-transmission-costs-caiso-says/519935/

The Commission codified these findings as part of the 2020 update to the ACC by affirming that each of the three IOUs must value the DER-avoided cost of transmission investment (just load growth so far), including in the form of Community Microgrids and other Non-Wire Alternatives ("NWAs"). Avoiding the need for new transmission, from load growth alone, is worth an additional 2.5 cents/kWh in the evenings, in addition to the current value of existing transmission costs which average about 2 cents/kWh. As illustrated in this infographic, current distortions in allocating transmission cost steal roughly 4.5 cents/kWh of value from local renewables and other DER:



Existing transmission costs, 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. 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.

Because current TAC in IOU service territories are calculated at the customer meter, rather than at the transmission-distribution substation, all energy is charged that 2 cents/kWh TAC as if it all used the transmission grid. Importantly, in non-IOU service territories, TAC are metered and assessed properly, at the transmission-distribution substation for non-IOU service territories. In a centralized DER planning proceeding, the Commission has the obligation to study the affects that TAC have on ratepayers and the changes in levels of DER penetration that might result from fixing the existing market distortion TAC cause.

IV. CONCLUSION

The Clean Coalition appreciates the opportunity to submit these opening comments

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