BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902E) for Authority to Implement Optional Pilot Program to Increase Customer Access to Solar Generated Electricity.	Application 12-01-008 (Filed January 17, 2012)
And Related Matters.	Application 12-04-020 Application 14-01-007

CLEAN COALITION OPENING COMMENTS ON PROPOSED DECISION ADDRESSING PARTICIPATION OF ENHANCED COMMUNITY RENEWABLES PROJECTS IN THE RENEWABLE AUCTION MECHANISM AND OTHER REFINEMENTS TO THE GREEN TARIFF SHARED RENEWABLES PROGRAM

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Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the Clean Coalition respectfully submits these opening comments on the *Proposed Decision Addressing Participation of Enhanced Community Renewables Projects in the Renewable Auction Mechanism and Other Refinements to the Green Tariff Shared Renewables Program* ("PD"), dated April 12, 2016.

I. INTRODUCTION

The Clean Coalition supports the Commission's efforts to implement Senate Bill ("SB") 43 and offers the following comments to improve upon two aspects of the Green Tariff Shared Renewables ("GTSR") program. First, the Commission should allow sub-500 kilowatt ("kW") resources to participate in the program, pending the Federal Energy Regulatory Commission ("FERC") approving the California Independent System Operator's ("CAISO's") tariff filing that seeks to facilitate participation of aggregations of distribution-connected resources in CAISO's energy and ancillary services markets. Second, the Commission should require the utilities to revisit the program through Advice Letters in order to monetize additional value streams as they develop.

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, advanced inverters, demand response, and energy storage—and we establish market mechanisms that realize the full potential of integrating these solutions. The Clean Coalition also collaborates with utilities and municipalities to create near-term deployment opportunities that prove the technical and financial viability of local renewables and other DER.

II. Comments

a. *The Commission should allow sub-500 kW projects to participate in the program, pending FERC approval of CAISO's March 4, 2016 tariff filing.*

As part of Phase IV Track B, the Commission considered participation of sub-500 kW resources in the GTSR program, but despite being a relatively uncontroversial issue in both comments and the Energy Division workshop, the PD rejected the proposal. The PD found that it is premature to allow participation of sub-500 kW projects for three reasons: (1) CAISO does not allow facilities less than 500 kW to participate in the CAISO market or to install the requisite metering equipment; (2) the Renewable Auction Mechanism ("RAM") and Renewable Market Adjusting Tariff ("ReMAT") do not currently have rules addressing participation of projects less than 500 kW in size; and (3) projects less than 3 MW in size have not participated in the Enhanced Community Renewables ("ECR") component.[1] For the reasons articulated below, the three cited concerns should not prevent the Commission from creating a pathway to allow these resources to participate in the GTSR program should FERC approve CAISO's tariff amendment.

The PD's first concern is valid but will not likely remain an issue going forward. Under CAISO's current tariff language, facilities must be at least 500 kW in size in order to be eligible to receive a CAISO meter and participate in the CAISO market. However, on March 4, 2016, CAISO requested that FERC amend its governing tariff to facilitate participation of aggregations of sub-500 kW distribution-connected resources in CAISO's energy and ancillary services

[1] PD at 17–18.

markets. CAISO requested that FERC issue a decision on its proposed modifications by June 3, 2016.[2] A number of parties filed comments with FERC in response to the proposal, but no party protested the proposed tariff amendment.[3] It would be imprudent for the Commission to restrict the GTSR program knowing that CAISO will likely soon allow sub-500 kW resources to bid into its market. Instead, the Commission should make participation of sub-500 kW projects contingent on FERC approving the proposed tariff amendment.

Second, the PD cites the lack of established rules for participation of projects less than 500 kW in both RAM and ReMAT. If FERC approves CAISO's tariff amendment, Energy Division should work to update RAM and ReMAT in order to allow projects less than 500 kW in size to participate in both of the procurement mechanisms, whether or not the Commission extends GTSR eligibility to sub-500kW resources. If necessary, the Commission could also make participation of these smaller resources contingent on Energy Division completing any required updates to RAM.

Third, the PD cites the lack of participation of projects less that 3 MW in the ECR component to date. However, the ECR component is not sufficiently established to provide any meaningful evidence of future participation in the program. Many developers are likely waiting for the Commission to issue this decision to address the regulatory uncertainty surrounding the ECR component before expending resources on ECR projects of any size. Further, the market for sub-500 kW projects is likely to expand following FERC approval of CAISO's proposed tariff amendment.

Extending eligibility to sub-500 kW resources is particularly important to the Environmental Justice ("EJ") Reservation. Prior comments in this proceeding have shown that the most suitable multi-family rooftops and parking lots for siting solar resources in disadvantaged communities contain less than 500 kW of capacity on average.[4] Decision 15-01-051 recognized these benefits, stating "[w]e agree that smaller facilities, such as those under 500

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[2] Cal. Indep. Sys. Operator, *Distributed Energy Resource Provider* at 33, Docket No. ER16-1085 (Mar. 4, 2016).

[3] *See* Cal. Indep. Sys. Operator, *Answer of the California Independent System Operator Corporation to Comments* at 1, Docket No. ER16-1085 (Apr. 11, 2016).

[4] *See, e.g.*, *Clean Coalition Comments on Pacific Gas & Electric Company's Enhanced Local Community Renewables Proposal* (Mar. 7, 2014); *Comments of the Sustainable Economies Law Center on Pacific Gas and Electric Company's Green Option Program Enhanced Community Renewables Program* (Mar. 7, 2014).

kW, may be the most suitable for the EJ Reservation."[5] Additionally, siting these projects in disadvantaged communities would yield psychological benefits that could lead to exponential growth of both local solar resources and participation in the program.[6] The Commission should make every attempt possible to ensure that the EJ Reservation is successful, and this added flexibility would be a good first step.

In comments, and even more so following the Phase IV Track B workshop, most parties agreed with this proposal. The only remaining issue was the added costs for these resources that are unrelated to project size.[7] However, these costs are balanced by the benefits of increasing siting opportunities in the built environment and allowing communities to host solar projects close to load—two factors that will increase the overall success of the program. Also, if the utilities find that sub-500 kW Green Tariff projects are prohibitively expensive, then the utilities will simply not select the projects in the bidding process. For sub-500 kW ECR projects, if developers are able to find subscribers willing to buy energy from a given project, then the Commission should allow these projects to participate in the program—regardless of any premium related to the size of the project.

Finally, data from the National Renewable Energy Laboratory found no substantial difference between the average total unit costs of rooftop systems between 100 kW and 1 MW.[8] While average costs did decline with size, one fifth of installations between 100 kW and 250 kW were at or below the median price of projects greater than 1 MW. If project specific efficiencies allow competitively priced smaller installations at appropriate sites, these should be allowed. As shown in Phase IV Track B comments, extending eligibility to sub-500 kW projects greatly increases the number of eligible siting opportunities and the total capacity available for

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[5] D.15-01-051 at 55.

[6] *See Phase IV Track B Opening Comments of the California Environmental Justice Alliance* at 2 (Nov. 9, 2015) (citing Bryan Bollinger & Kenneth Gillingham, *Environmental Preferences and Peer Effects in the Diffusion of Solar Photovoltaic Panels*, MARKETING SCIENCE (Aug. 2010), *available at* http://blog.zeit.de/gruenegeschaefte/files/2011/04/BollingerGillingham_PeerEffectsSolar.pdf).

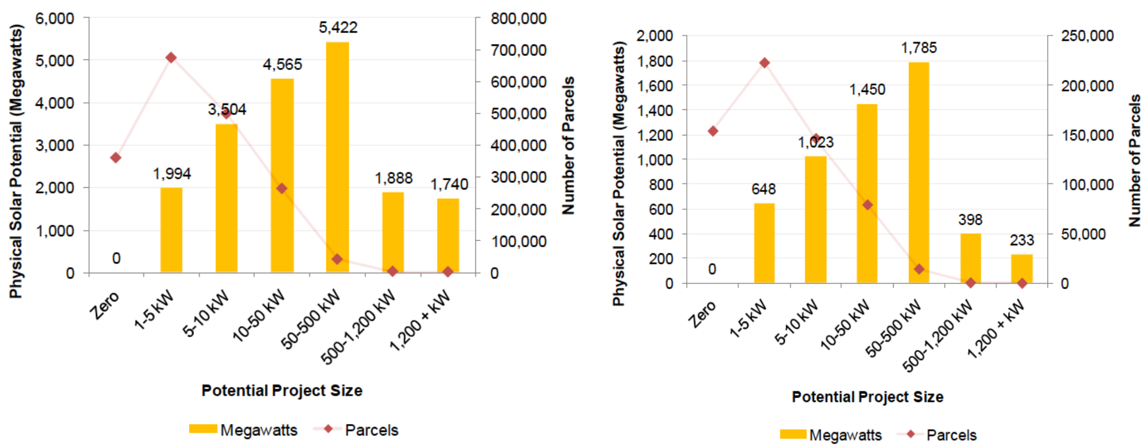
[7] *See Southern California Edison Company's (U 338-E) Phase IV Track B Opening Comments* at 3 (Nov. 9, 2015).

[8] Lawrence Berkeley Nat'l Lab., *Photovoltaic System Pricing Trends: Historical, Recent, and Near-Term Projections 2014 Edition*, NREL/PR-6A20-62558 (Sept. 2014).

development.[9] Having a larger pool of potential resources also allows greater local participation and more optimal coordination of siting in consideration of interconnection hosting capacity constraints that can impose substantial grid upgrade costs on larger projects. This is illustrated below in a detailed analysis of siting potential performed for the city and county of Los Angeles by the UCLA Luskin Center for Innovation.[10]

<u>Figure 1: MW of Rooftop PV Potential by Project Size</u>[11]

County of Los Angeles **City of Los Angeles**



The Commission should not limit program flexibility at this early stage of implementation, especially when considering SB 43 specified upper but not lower bounds on project size.[12] Delaying consideration of this issue would effectively bar participation of the projects in the program due to its sunset date in 2018. The Clean Coalition therefore respectfully urges the Commission to extend program eligibility to sub-500 kW resources, contingent on FERC approval of CAISO's proposed tariff modification and, if necessary, on Energy Division completing modifications to RAM that would allow sub-500 kW resources to participate in the mechanism.

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[9] *Clean Coalition Opening Comments on the Green Tariff Shared Renewables Program Phase IV Track B Issues* (Nov. 9, 2015).

[10] J.R. DeShazo & Ryan Matulka, Bringing Solar Energy to Los Angeles: An Assessment of the Feasibility and Impacts on an In-Basin Solar Feed-in-Tariff Program (July 2010), available at http://innovation.luskin.ucla.edu/sites/default/files/Bringing%20Solar%20to%20Los%20Angeles.pdf.

[11] *Id.*

[12] CAL. PUB. UTIL. CODE § 2833(b), (d)(1)(A).

b. The Commission should require the utilities to revisit the program through Advice Letters in order to monetize additional value streams that emerge.

The PD noted the Clean Coalition's position to monetize locational benefits but stated that this and all other parties' proposals to make the program more affordable and accessible pursuant to Section 2833(j) were insufficiently developed.[13] However, the Clean Coalition's proposal was that once the Distribution Resources Plans proceeding values locational benefits, the utilities should pass these benefits on to GTSR subscribers. Support for this position is found in Decision 15-01-051, which "direct[ed] the three IOUs to propose a methodology for calculating locational grid benefits into the GTSR program via a Tier 2 Advice Letter within 60 days of a decision in [the Distribution Resources Plans proceeding]."[14]

The Clean Coalition additionally urges the Commission to require the utilities to modify the program through Tier 3 Advice Letters within 60 days of other value streams emerging. This proposal is supported by the text of SB 43, which requires the Commission to include any other costs or values applicable to eligible renewable energy resources contained in the GTSR portfolio.[15] One important source of value may result from the Clean Coalition's work to modify CAISO's methodology for calculating Transmission Access Charges ("TAC").[16] The Clean Coalition has been working with CAISO and other stakeholders in the Energy Storage and Distributed Energy Resources ("ESDER") initiative to explore more appropriate TAC accounting methods. If CAISO accepts the proposed methodology, projects interconnected to the distribution grid serving local loads would realize savings of approximately $0.03/kWh, levelized over a 20-year period. The Commission should ensure that the utilities directly pass on the savings from this and any other value streams that subsequently emerge to GTSR subscribers who source their energy from distributed generation.

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[13] PD at 19.

[14] D.15-01-051 at 126.

[15] CAL. PUB. UTIL. CODE § 2833(m) ("A participating customer's rates shall be debited or credited with any other commission-approved costs or values applicable to the eligible renewable energy resources contained in a participating utility's green tariff shared renewables program's portfolio. These additional costs or values shall be applied to new customers when they initially subscribe after the cost or value has been approved by the commission.").

[16] Clean Coalition, Transmission Access Charges, http://www.clean-coalition.org/our-work/tac/ (last visited May 2, 2016).

III. CONCLUSION

The Clean Coalition appreciates the opportunity to submit comments on the PD and supports the Commission's continued efforts to implement the GTRS program.

Respectfully submitted,

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Dated: May 2, 2016

APPENDIX A: Proposed Findings of Fact and Conclusions of Law

The Clean Coalition provides the following recommended changes to the findings of fact and conclusions of law in the *Proposed Decision Addressing Participation of Enhanced Community Renewables Projects in the Renewable Auction Mechanism and Other Refinements to the Green Tariff Shared Renewables Program*, dated April 12, 2016.

Findings of Fact

8. ~~CAISO requires a minimum load of 500 kW to receive a CAISO meter and participate in CAISO markets~~. **On March 4, 2016, CAISO submitted a proposed tariff amendment to FERC in order to facilitate participation of aggregations of sub-500 kW distribution-connected resources in the CAISO's energy and ancillary services markets. FERC is expected to rule on CAISO's proposal by June 3, 2016.**

Conclusions of Law

3. Each of the ordered Renewable Auction Mechanism solicitations should be open to Enhanced Community Renewables projects ~~between 500 kW and~~ **up to** 20 MW and Enhanced Community Renewables-Environmental Justice projects ~~between~~ ~~500 kW and~~ **up to** 1 MW consistent with §2833(b) **,(d)(1)(A)**.

11. ~~It is premature to allow participation of sub-500 kW projects in GTSR.~~ **Sub-500 kW projects may participate in both the Enhanced Community Renewables and Green Tariff components of the GTSR program, pending FERC approval of CAISO's proposed tariff amendment, which would allow sub-500 kW projects to aggregate and participate in the CAISO market.**

18. The three utilities shall propose a methodology for calculating and including locational benefits in the GTSR program via a Tier 2 Advice Letter within 60 days of a decision in R.14-08-013.

19. The three utilities shall propose bill credits through the Tier 3 Advice Letter process for value streams that emerge after the date of this decision within 60 days of their development in other venues.