

**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 THE GREEN TARIFF SHARED
RENEWABLES PROGRAM PHASE IV TRACK B ISSUES**

Brian Korpics
Staff Attorney
Clean Coalition
16 Palm Ct
Menlo Park, CA 94025
(708) 704-4598
brian@clean-coalition.org

November 9, 2015

**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 12-02-040
Application 14-01-007

**CLEAN COALITION OPENING COMMENTS ON THE GREEN TARIFF SHARED
RENEWABLES PROGRAM PHASE IV TRACK B ISSUES**

I. INTRODUCTION

On April 15, 2015, in the Green Tariff Shared Renewables (“GTSR”) proceeding, the California Public Utilities Commission (“Commission”) issued the *Assigned Commissioner and Administrative Law Judge’s Scoping Ruling for Phase IV of Consolidated Proceeding*. Pursuant to that ruling and the October 26, 2016, *Administrative Law Judge Ruling (1) Adopting Comment Schedule on Senate Bill 793 and Renewables Auction Mechanism as an Enhanced Community Renewables Procurement Tool and (2) Revising the Schedule for Phase 4 Track B*, the Clean Coalition hereby submits the following opening comments on Phase IV Track B issues. The comments below focus on: (1) the need to extend program eligibility to sub-500 kW projects, (2) the benefits of utilizing a modified ReMAT procurement mechanism, and (3) more accurately reflecting distribution costs and benefits of GTSR projects by exempting eligible participants from Transmission Access Charges.

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

1. *Consideration of sub-500 kilowatt projects*

The Clean Coalition respectfully urges the Commission to extend GTSR program eligibility to projects sized smaller than 500 kW. Smaller projects are especially important to the program’s enhanced community renewables (“ECR”) component, which the legislature created “to facilitate development of eligible renewable energy resource projects located close to the source of demand.”¹ Siting resources close to load in the built environment necessarily limits facility sizes, and lowering the minimum project size would significantly open up siting opportunities. Many locations in urban areas—such as rooftops of multi-family homes and parking lots—could successfully support solar projects as small as approximately 200 kW.² In rooftop and parking area solar siting analysis performed by the Clean Coalition,³ and in prior estimates produced by UCLA’s Luskin Center for Innovation,⁴ siting opportunities were far more numerous and flexible with the inclusion of these smaller, commercial-sized projects. Another Clean Coalition analysis of solar potential of the Bayview-Hunters Point area of San Francisco found that the best multifamily rooftops in the area had an average of 250 kW of solar potential, and the best parking lots had an average of 350 kW of solar potential.⁵

¹ CAL. PUB. UTIL. CODE § 2833(o).

² See *Decision Approving Green Tariff Shared Renewables Program for San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southern California Edison Company Pursuant to Senate Bill 43*, D.15-01-051 at 55 (Jan. 29, 2015) (citing Clean Coalition’s Comments on PG&E’s Enhanced Local Community Renewables Proposal at 5–7 and Appendix.

³ Clean Coalition, *Solar Siting Surveys: SCE Preferred Resources Pilot Solar Siting Survey*, <http://www.clean-coalition.org/resource/solar-siting-surveys/> (last visited Nov. 9, 2015).

⁴ J.R. DeShazo & Ryan Matulka, *Bringing Solar Energy into Los Angeles: An Assessment of the Feasibility and Impacts of an In-Basin Solar Feed-in Tariff Program* (July 8, 2010), *available at* <http://innovation.luskin.ucla.edu/sites/default/files/Bringing%20Solar%20to%20Los%20Angeles.pdf>.

⁵ See the Appendix for details about the Clean Coalition’s analysis of Bayview-Hunters Point solar potential.

Decision 15-01-015 noted two concerns with allowing projects under 500kW to participate in the GTSR program. First, the California Independent System Operator (“CAISO”) has set 500 kW as the minimum facility size to have its own generator resource identification.⁶ However, in June, the CAISO Board approved the Distributed Energy Resource Provider (“DERP”) Draft Final Proposal, which seeks to allow DER aggregators to sell sub-500 kW resources into the CAISO market.⁷ Under DERP, independent aggregators and utilities will be able to purchase output from smaller solar systems and bundle baseline capacity to sell in the CAISO market. CAISO’s DERP proposal should completely address the decision’s first concern with sub-500 kW projects.

Second, the decision predicts that extending eligibility to projects of less than 500 kW will increase the time and resources required to run the program, which will in turn raise costs for subscribers.⁸ While increasing the number of suppliers and projects will require the processing of additional supplier offers, the marginal cost of doing so is de minimis. However, the Commission should recognize that increasing the availability of competitively priced offers would lead to further market development and lower prices through increased competition. Through the GTSR program, the Commission should allow the market for these smaller projects to grow, thereby continuing to drive costs down. Extending program eligibility to sub-500 kW resources will not have a significant effect on costs, but it would meaningfully benefit the program by increasing the availability of resources located close to sources of demand.

⁶ *Decision Approving Green Tariff Shared Renewables Program for San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southern California Edison Company Pursuant to Senate Bill 43*, D.15-01-051 at 36 (Jan. 29, 2015).

⁷ See Cal. Indep. Sys. Operator, Expanded Market and Telemetry Options Phase 2, Distributed Energy Resource Provider (DERP), Draft Final Proposal (June 10, 2015), available at http://www.aiso.com/Documents/DraftFinalProposal_ExpandedMetering_TelemetryOptionsPhase2_DistributedEnergyResourceProvider.pdf.

⁸ *Decision Approving Green Tariff Shared Renewables Program for San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southern California Edison Company Pursuant to Senate Bill 43*, D.15-01-051 at 36–37 (Jan. 29, 2015).

3. *Optimizing procurement under the GTSR Program, including utilizing other mechanisms for procurement aside from Renewables Portfolio Standard solicitation based on (RAM) model*

The Clean Coalition continues to advocate for use of a modified ReMAT solicitation for the GTSR program. ReMAT is better suited procure smaller projects that are cited closer to load because the Commission specifically designed the mechanism for this market segment. ReMAT is limited to smaller projects no greater than 3 MWs in size and those that are interconnected to the distribution grid.⁹ Targeting procurement to these smaller projects would also work towards the statutory directive to “procure eligible renewable energy resources that are located in reasonable proximity to enrolled participants.”¹⁰ The ECR component would especially benefit from utilizing ReMAT because SB 43 requires those projects to be located near sources of demand.¹¹

The Clean Coalition also urges the Commission to adopt several alterations to ReMAT that would create a more efficient procurement mechanism. Currently, Pacific Gas and Electric Company (“PG&E”) and Southern California Edison Company (“SCE”) only have 5 MW available in ReMAT per each 2-month program period for each product type—baseload, peaking as-available, non-peaking as-available—and San Diego Gas & Electric Company (“SDG&E”) only has 3 MW available in each product type. This is a fairly limited opportunity for procurement and should be increased. The capacity offered for the peaking as-available product that corresponds to solar projects should be increased to at least 10 MW per program period for PG&E and SCE, and 6 MW for SDG&E. The Commission may consider whether even greater capacity is needed through ReMAT, and whether greater capacity is needed in other product types.

Additionally, due to the specific need for GTSR subscribers to create qualifying demand prior to project eligibility, the utilities should allow projects to enter the program procurement queue before applying for interconnection. Currently under ReMAT, projects must apply for

⁹ CAL. PUB. UTIL. CODE § 399.20(b)(1); *Decision Revising Feed-In Tariff Program, Implementing Amendments to Public Utilities Code Section 399.20 Enacted by Senate Bill 380, Senate Bill 32, Senate Bill 2 1X and Denying Petition for Modification of Decision 07-07-027 by Sustainable Conservation and Solutions for Utilities, Inc.*, D.12-05-035 at 58 (May 24, 2012) (interpreting CAL. PUB. UTIL. CODE § 399.20(b)(3)).

¹⁰ CAL. PUB. UTIL. CODE § 2833(e).

¹¹ *See id.* § 2833(o).

interconnection and expend significant resources doing so before entering the queue. Instead, the Commission should require projects to immediately submit an interconnection application, correct any deficiencies, and have the application deemed complete within 30 days of accepting a conditional PPA offer. The Commission should also require projects to complete a phase 1 interconnection study, Fast Track, or a System Impact Study within six months of accepting that same PPA offer in order to retain the PPA. Through this approach, a developer would be able to plan a project and enter the queue, wait for a sufficient number of subscribers to sign up in the area—at which point the project would qualify for a PPA in the next allocation—and then accept a PPA and immediately apply for interconnection. Under the current framework, developers would need to spend resources applying for interconnection and commit to a timeline to build the project prior to addressing critical uncertainty related to obtaining sufficient subscriber capacity and defining the PPA price. This approach is similar to modifications in interconnection requirements established by SCE in their current Preferred Resources Pilot procurement solicitation (“PRP 2”).

5. *In light of Distribution Resources Plans, more accurately reflecting distribution costs and benefits of GTSR projects*

Prior efforts in the GTSR proceeding have highlighted SB 43’s requirement that non-participating ratepayers not subsidize the GTSR program, but customer indifference should also require that GTSR participants not subsidize non-participating ratepayers.¹² Subscribers to the GTSR program should be credited for the avoided costs and locational benefits of GTSR projects that accrue to non-participants. SB 43 also requires the Commission to include any other costs or values applicable to eligible renewable energy resources contained in the GTSR portfolio.¹³ Decision 15-01-051 established that methods to determine locational value of projects would be decided in other Commission proceedings, like the Distribution Resources Plans and Integrated Distributed Energy Resources proceedings.¹⁴ As these proceedings progress, the Commission

¹² See *id.* § 2833(p).

¹³ *Id.* § 2833(m).

¹⁴ See *Decision Approving Green Tariff Shared Renewables Program for San Diego Gas & Electric Company, Pacific Gas and Electric Company, and Southern California Edison Company Pursuant to Senate Bill 43*, D.15-01-051 at 126 (Jan. 29, 2015).

should update valuation approaches in the GTSR program. However, Transmission Access Charges (“TACs”) are one significant cost that will not be addressed in other Commission proceedings, can easily be valued, and should be incorporated into the ECR component without delay.

TACs are fees designed to pay for the state’s transmission system, including operations and maintenance, amortization of capital, and return-on-equity. TACs add about \$0.03 per kWh to the levelized cost of energy over a 20-year contract, which is about 30% of the wholesale value of energy in California. Energy from ECR projects located close to sources of demand will not utilize the transmission grid and should therefore be exempt from TACs, which are levied on ratepayers based on their overall electricity consumption. The Clean Coalition proposes that these charges be eliminated for ECR subscribers whenever their demand is met from electricity that does not utilize the transmission system. GTSR participants purchasing renewable energy at a premium should not also subsidize transmission grid investments for non-participating ratepayers.

The Clean Coalition understands that the Commission does not have jurisdiction to correct this market distortion for all ratepayers who receive electricity from local sources. However, the Commission should act to preserve ratepayer indifference in the context of GTSR because these cost savings will greatly contribute to the overall affordability and success of the program. We also respectfully ask the Commission to separately petition CAISO to consider overall TAC adjustments outside of the scope of this proceeding that are necessary to properly allocate cost responsibility with cost causation and reflect the benefits of clean, local energy.

III. CONCLUSION

The Clean Coalition appreciates the opportunity to submit opening comments on Phase IV Track B issues in this proceeding.

Respectfully submitted,

/s/ Brian Korpics _____
Brian Korpics
Staff Attorney
Clean Coalition

Dated: November 9, 2015

APPENDIX

Clean Coalition's Assessment of Solar Photovoltaic Potential of Bayview-Hunters Point Substation

Type: New PV	Total Capacity (MW)	Total Output (annual MWh)
Commercial (incl. MDUs)	16.0	17,333
Residential	13.5	28,275
Parking Lots	2.6	4,102
Redev Zone	20.5	32,146
Total New PV	52.1 MW	81,856
Existing DG	8.5	13,338
Total DG Potential:	60.6	95,194

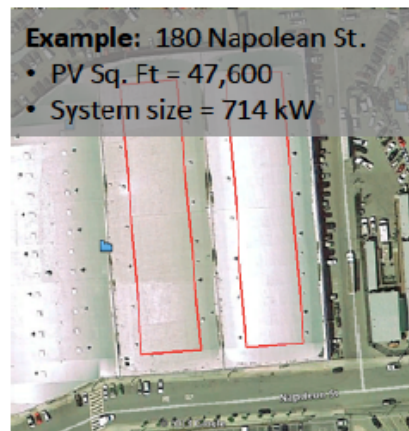
Potential PV: Commercial Rooftops

Highlights:

- Number of visually-sited highest value "A" sites = **34**
 - Total PV-potential rooftop square feet = **1.4M**
 - Total participating sq. ft. @ 50% = **736K**
- Generation potential, participating rooftops = **11 MW + 5 MW (MDUs) = 16 MW**

Hunters Point Rooftops - Commercial

<u>Assumptions</u>	
Watts/sq. ft.	15
PV hrs./yr.	1570
Participation Factor	50%
<u>Results</u>	
Total Sq. Ft.	1,472,000
Total Sq. Ft. Participating	736,000
Total Watts Participating	11,040,000
Total PV in MW	11.0
Total PV in Annual MWhr	17,333
Average kW per site	649



Potential PV: Parking Lots

Highlights:

- Number of visually-sited highest value "A" sites = **13**
- Total PV-potential parking lot square feet = **348K**
 - Total participating sq. ft. @ 50% = **174K**
- Generation potential, participating parking lots = **2.6 MW**

Hunters Point Parking Lots

<u>Assumptions</u>	
Watts/sq. ft.	15
PV hrs./yr.	1,570
Participation Factor	50%
<u>Results</u>	
Total Sq. Ft.	348,400
Total Sq. Ft Participating	174,200
Total Watts Participating	2,613,000
Total PV in MW	2.6
Total PV in Annual MWh	4,102
Average kW per site	402

Example: 1485 Bay Shore Blvd

- PV Sq. Ft = 37,800
- System size = 567 kW



Potential PV: Residential Rooftops

Highlights:

- Total residential sites = 14,000
- Average PV-viable square feet per residence (from 50 sites) = **257**
 - Total PV-potential residential square feet = **3.6M**
 - Total participating sq. ft. @ 25% = **900K**
- Generation potential, participating rooftops = **13.5 MW**

Hunters Point Rooftops - Residential

<u>Assumptions</u>	
Watts/sq. ft.	15
PV hrs./yr.	1570
Participation Factor	25%
<u>Results</u>	
Total HH	14,000
Average PV-viable sq. ft. per HH	257
Total PV-viable Sq. Ft.	3,601,920
Total PV-viable Sq. Ft. Participating	900,480
Total PV in Watts	13,507,200
Total PV in MW	13.5
Total PV in Annual MWh	21,206
Average PV system size per HH. kW	4

Example: 50 average rooftops

- Average PV Sq. Ft = 257
- Average system size = 4 kW

