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. A.12-01-008 (Filed January 17, 2012)

A.12-04-020 (Filed April 24, 2012)

A.14-01-007 (Filed January 10, 2014)

2017 ANNUAL GREEN TARIFF SHARED RENEWABLES PROGRAM REPORT OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

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Dated: March 15, 2018

And Related Matters.

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2017 ANNUAL GREEN TARIFF SHARED RENEWABLES PROGRAM REPORT OF PACIFIC GAS AND ELECTRIC COMPANY (U 39 E)

Pursuant to Ordering Paragraph 10 of Decision 15-01-051, Pacific Gas and Electric

Company ("PG&E") files this annual report on Green Tariff Shared Renewables ("GTSR")

Program. The Annual Report is found at Attachment 1 and summarizes the period of January 1 -

December 31, 2017.

Respectfully submitted,

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By: /s/ Christopher J. Warner

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ATTACHMENT 1

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INTRODUCTION

As directed by Decision (D.) 15-01-051,¹ Pacific Gas and Electric Company (PG&E or the Company) provides the California Public Utilities Commission (CPUC or Commission) and interested parties with this Annual Report of the Green Tariff Shared Renewables (GTSR) Program for the 2017 calendar year. An Interim Annual Report for 2015 was filed on August 17, 2015, and the Annual Report summarizing the full year of 2015 was filed on March 15, 2016. The Annual Report for 2016 was filed on March 15, 2017.

The GTSR program was approved by the Commission in D.15-01-051. The program enables PG&E bundled electric customers to purchase up to 100 percent of their electricity from new small- to mid-sized renewable energy projects located in PG&E's service area. The GTSR program offers customers two options for purchasing renewable energy. The Green Tariff option, offered under the program name "PG&E's Solar Choice" and the tariff "E-GT," gives customers the choice of purchasing either 50% or 100% of their electric usage from a pool of new "steel in the ground" solar projects in PG&E's service territory. The Enhanced Community Renewables (ECR) option, offered under the program name "Regional Renewable Choice" and the tariff "E-ECR," allows customers to purchase up to 100% of their electric usage from specific newly developed generation projects from which PG&E procures energy.

This report will generally utilize the customer-facing names (Solar Choice and Regional Renewable Choice) for the two GTSR programs, except when referencing regulatory actions pertaining to all 3 investor-owned utilities.

This report includes the following contents, as directed by D.15-01-051:

- Enrollment Reporting and Available Capacity
- Generation Transferred from Renewables Portfolio Standard (RPS) to GTSR Program
- GTSR Revenue and Cost Reporting Summary
- External Advisory Board
- Marketing Report
- Community Choice Aggregation (CCA) Code of Conduct Report
- Supplier Diversity
- California Alternate Rates for Energy (CARE) Enrollments Related to Environmental Justice Projects
- Customer Profile Information: Low Income Customers and Customers who Speak a Language other than English at Home
- Reports of Regional Renewable Choice Fraud or Misleading Advertisements

¹ Ordering Paragraph (OP) 10.

ENROLLMENT REPORTING AND AVAILABLE CAPACITY

Decision (D.) 15-01-051 sets a total capacity for PG&E's GTSR program of 272 megawatts (MW), with 45 MW reserved for facilities of no larger than 1 MW located in areas previously identified by the California Environmental Protection Agency as the most impacted and disadvantaged communities (Environmental Justice or EJ Reservation) and 20 MW reserved for the City of Davis.² Additionally, SB43 mandates that 100 MW of the total 600 MW program capacity for all three investor-owned utilities be reserved for participation by residential customers. For PG&E, this reservation is set at 45 MW of the GTSR program capacity.

In the Decision, the Commission directed the investor-owned utilities, including PG&E, to initiate advanced procurement for the Green Tariff program.³ The Commission set a minimum goal of 50 MW for PG&E with procurement to be completed within one year following the adoption of the Decision. On January 22, 2016, PG&E filed Advice Letter 4780-E, seeking approval of contracts for the Solar Choice program totaling 52.75 MW. The CPUC approved that advice letter effective February 21, 2016.

In D.16-05-006, the Commission ordered the investor-owned utilities to hold one solicitation in 2016 and two solicitations in 2017 for the ECR (Regional Renewable Choice) program.⁴ In accordance with that Decision, PG&E filed Advice Letter 4856-E, which was approved effective July 15, 2016 and followed by the first Regional Renewable Choice solicitation launch on August 31, 2016. PG&E then filed Advice Letter 5002-E, which was approved effective March 1, 2017. The subsequent 2017 Spring Regional Renewable Choice solicitation was launched on April 26, 2017. PG&E then filed Advice Letter 5113-E, which was approved effective August 21, 2017. The subsequent Fall Regional Renewable Choice solicitation was launched on September 12, 2017, and is scheduled to be completed in 2018.

Table 1 presents the capacity procured for the Solar Choice and Regional Renewable Choice components of the GTSR program. As enrollment has not exceeded the solar capacity procured in 2016 for the Solar Choice program, no additional solicitations have been held in 2017. Thus far, two Regional Renewable Choice solicitations have been held and completed after direction by D.16-05-006, but they have not resulted in any awarded contracts. The third solicitation is still underway.

² D.15-01-051, OP 7.

³ *Id.* page 27.

⁴ D.16-05-006, OP 1.

TABLE 1
CUMULATIVE PROCURED RENEWABLE CAPACITY FOR SOLAR CHOICE AND REGIONAL RENEWABLE CHOICE

Category	Available Capacity (MW)	Solar Choice Procured (MW)	Regional Renewable Choice Procured (MW)	Remaining Capacity (MW)
Unrestricted	207	50.75	0	156.25
EJ Reservation	45	2	0	43
City of Davis	20	0	0	20
Totals	272	52.75	0	219.25

Table 2 presents GTSR customer enrollment data, showing estimated customer capacity for Solar Choice and Regional Renewable Choice by customer type. Enrollment capacity presented in Table 2 is calculated by converting each enrolled customer's past 12 months of historical usage, where available, to MW using the weighted average capacity factor of the interim resources currently serving the GT program.

Note that in March of 2018, in the process of developing this Annual Report, PG&E identified a discrepancy in the manner in which estimated enrolled MW had been reported previously under the Solar Choice program. While the root cause investigation is yet to be fully completed, the error appears to be an inadvertent human error involving software code development and testing. The corrected numbers for 2016 are reported in Table 2 along with the 2017 numbers. This discrepancy impacted only the reported estimated MW equivalent of customer enrollment. It did not impact other reported figures, or any customer billing or revenue-related data.

Customers enrolled in the Solar Choice program account for approximately 15.6 MW of capacity. As there were no Power Purchase Agreements awarded under the Regional Renewable Choice program as of the end of 2017, there was no customer enrollment in the Regional Renewable Choice program in 2017.

Category	2016 Originally Reported Solar Choice Enrolled (MW)	2016 Corrected Solar Choice Enrolled (MW)	2017 Solar Choice Enrolled (MW)	2017 Regional Renewable Choice Enrolled (MW)	2017 Total by Customer Type (MW)
Residential Customers	6.29	2.62	7.74	0	7.74
Non-Residential Customers	8.33	5.95	7.87	0	7.87
Total by Program	14.63	8.57	15.61	0	15.61

 TABLE 2

 CUMULATIVE ESTIMATED MEGAWATTS (MW) OF CUSTOMER ENROLLMENT

GENERATION TRANSFERRED FROM RPS TO GTSR PROGRAM

During 2017, Solar Choice customers' usage was supported exclusively by interim pool solar resources. PG&E transferred a total of 39,341,373 kilowatt-hours of solar photovoltaic (PV) generation from 24 interim pool resources from the Renewables Portfolio Standard (RPS) program to the Solar Choice program. The solar PV generation transferred directly corresponds to sales to GTSR customers served under the Solar Choice program, which is summarized in Table 3:

Jan	Feb	Mar	Apr	May	Jun	
3,246,720	2,867,272	3,669,307	2,605,359	2,841,194	2,960,383	
						_
Jul	Aug	Sept	Oct	Nov	Dec	Total

TABLE 3SOLAR CHOICE SALES (KWH) – JANUARY THROUGH DECEMBER 2017

PG&E will retire a corresponding amount of Renewable Energy Certificates (RECs) in the Western Renewable Energy Generation Information System tracking system from interim pool resources to match its 2017 Solar Choice sales totals. PG&E will report project-by-project REC transfers from the RPS program to the Solar Choice program for 2017 in its GTSR Annual Generation Transfer Report, to be submitted to the CPUC on September 1, 2018.

GTSR REVENUE AND COST REPORTING SUMMARY

GREEN TARIFF SHARED RENEWABLES BALANCING ACCOUNT

In 2017, PG&E recorded approximately \$4.4 million in revenues, net of the administration and marketing costs, as well as franchise fees and uncollectibles (FF&U), from customers served under the E-GT tariff option. These billed revenues were recorded to the Green Tariff Shared Renewables Balancing Account (GTSRBA), pursuant to the preliminary statement line item 4.a, which records the Solar Generation Charge and line item 4.b, which records the Program Charge.⁵ The Program Charge includes two tariffed rate components: (1) Vintaged Power

⁵ Green Tariff Shared Renewables Balancing Accounts Preliminary Statement GR: <u>http://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC_PRELIM_GR.pdf</u>

Charge Indifference Amount (VPCIA) and (2) Other Generation-related Program Charge expenses. Table 4 below summarizes the billed revenues received under the program.

TABLE 4
GTSRBA RECORDED REVENUE — JANUARY THROUGH DECEMBER 2017

Line No.	Revenues, Net of FF&U	2017 Total
1	Solar Generation Charge	\$3,148,901
2	Program Charge	
3	Vintaged Power Charge Indifference Amount	966,611
4	Other Gen-Related Expenses, Net of A&M	317,099
5	Total	\$ 4,432,611

In 2017, the Solar Choice customers Solar Generation Charge was supported exclusively by interim pool resources and the associated costs for these interim pool resources in 2017 were approximately \$3.1 million. The associated Program Charge expenses, which include the VPCIA and "other" generation-related expenses, were approximately \$1.3 million. Hence, the total program expenses for 2017 amounted to approximately \$4.4 million. Table 5 below summarizes the expenses incurred for the program's solar generation and program charges, net of the administration and marketing costs.

TABLE 5
GTSRBA RECORDED COSTS — JANUARY THROUGH DECEMBER 2017

Line No.	Expenses, Net of Admin & Marketing	2017 Total
1	Solar Generation Costs	\$ 3,148,901
2	Program Costs	1,283,710
3	Interest	973
4	Total	\$4,433,584

GREEN TARIFF SHARED RENEWABLES MEMORANDUM ACCOUNT

In 2017, PG&E incurred approximately \$1 million in expenses in order to implement and manage the GTSR Program. These expenses can be broken down into five major categories: program management, information technology/billing system, energy procurement labor, contact center operations, and outreach. The recorded expenses, by category, are shown in Table 6. The expenses were recorded into a memorandum account in accordance with D.15-01-

051.⁶ PG&E implemented careful tracking of administrative and marketing costs through the use of internal order numbers in order to maintain non-participant indifference of such costs. These expenses are further described in Chapter 10 of PG&E's Energy Resource Recovery Account Compliance Review Application, A.18-02-015, filed on February 28, 2018.

TABLE 6GTSR MEMO ACCOUNT RECORDED COST – JANUARY THROUGH DECEMBER 2017

Line No.	Description	Amount
1	Program Management	\$257,199
2	IT/Billing System	11,620
3	Energy Procurement	116,740
4	Contact Center Operations	46,004
5	Outreach	576,291
6	Total	\$1,007,854

EXTERNAL ADVISORY BOARD

PURPOSE

As directed by D.15-01-051, PG&E has established a GTSR External Advisory Board (EAB). The purpose of the EAB is to:

- 1) Encourage interested stakeholders to provide input and feedback to the development of the program;
- 2) Bring diverse viewpoints to key decisions and issues, with the goal of building a nationally-recognized, successful program;
- 3) Enable PG&E to solicit and receive input on specific issues, specifically regarding procurement, marketing, and program design; and
- 4) Leverage the ideas and actions of a supportive network of individuals towards the success of the program.

GTSR EXTERNAL ADVISORY BOARD MEMBERS

Members of the Advisory Board are listed below:

⁶ D.15-01-051, Conclusion of Law 58, p. 178.

Name	Role	Organization
Matthew Freedman	Consumer	The Utility Reform Network
Marc Joseph	Labor	California Coalition of Utility Employees
Helena Oh	Ratepayers	CPUC – Office of Ratepayer Advocates
Ortensia Lopez	Disadvantaged/Low Income Communities	El Concilio
John Sterling	Solar	Smart Electric Power Alliance
Cathy Zhang	Communities of Color	Joint Minority Parties
Julia Prochnik	Environmental	Natural Resources Defense Council
Cherie Chan	Commission Staff	CPUC – Energy Division
Jerry Meek	Business	Genentech
Kerrie Romanow	Municipalities	City of San Jose
Brandon Smithwood	Solar Advocacy	Solar Energy Industries Association

2017 MEETINGS

EAB meetings occurred on a quarterly basis throughout 2017. Below is a summary of the meeting agendas.

<u>Q1 2017 Meeting – March 22, 2017</u>

The agenda was as follows:

- Introductions
- Community Renewables Program Overview
- Q1 Program News
- Procured and Enrolled Capacity Update
 - o Enrollment Channels
 - o Enrollment Metrics
- Outreach
 - \circ Marketing
 - o External and Internal Communications
 - Governments and Businesses
- Regional Renewable Choice Update

Q2 2017 Meeting – June 29, 2017

The agenda was as follows:

- Procured and Enrolled Capacity Update
 - Enrollment Metrics
- Attrition Metrics Historical and Forecast
- Outreach
 - Marketing
 - External and Internal Communications
 - Government and Businesses
- Operational Update
- Procurement/Project Status
- Regional Renewable Choice Update
 - Legislative/Regulatory Update

<u>Q3 2017 Meeting – September 22, 2017</u>

The agenda was as follows:

- Enrollment Metrics
- Regulatory Update
 - o Securities Opinion
 - o EOY Filing
- Regional Renewable Choice Update
 - o EOY Filing
 - Third Procurement Solicitation
 - o Developer Marketing Materials Status Update
- Outreach
 - o 2018 Marketing Plan

Q4 2017 Meeting – December 19, 2017

The agenda was as follows:

- GTSR Extension Filing
- Solar Choice Enrollment Metrics
- Regional Renewable Choice: 3rd Solicitation Schedule
- Marketing Update
 - o 2017 Q4 Tactics
 - o 2018 Planning

MARKETING REPORT

A. 2017 Marketing Report

In 2017, PG&E continued a variety of recruitment activities to enroll customers in PG&E's Solar Choice program. PG&E's marketing outreach was guided by the following strategies:

- Gain program awareness cost efficiently by leveraging a combination of paid, owned and earned marketing channels.
- Customize the offer to make it more relevant to the audience by serving the right message in the right place at the right time.
- Sustain enrollments throughout the year with outreach at key times using a multichannel tactics approach.

PG&E continued focusing on cost-effective tactics to bring a customer through the decisionmaking process. Below you will find tactics deployed in 2017 listed by intended action to help the customer through this purchase process:

- *Education/Consideration*: Exposed the target audience to the program and highlighted the benefits of participation
 - Digital advertisements
 - Website information
 - Integrated the Solar Choice messages within other relevant communications
- *Conversion:* Drove program participation using 1:1 communication channels
 - o Email

Within all tactics deployed, PG&E focused on the program benefits of helping the environment and providing a green option with California-made solar. For the residential segment, messaging focused on customers enjoying outdoor behaviors and related activities of interest such as shopping at farmer's markets and practicing yoga. For non-residential customers, messaging continued to focus on how businesses help lead green energy growth in California while meeting sustainability goals. In addition, PG&E utilized a test-and-learn approach throughout 2017 continually optimizing messaging and tactics to focus on what resonated most with customers and what drove acquisition in the program.

B. Quantitative Assessment of 2017 Marketing Campaigns

In accordance with Section 7.2 of the GTSR Decision, below please find a recap of the quantitative assessment of 2017 marketing outreach effectiveness. PG&E achieved a gross customer enrollment count of 5,385, an 18% increase year over year.

Most effective conversion channel:

The most cost-effective conversion channel for enrollments continued to be email with a 28.74% open rate, 1.85% click through rate. In addition, email achieved an enrollment rate of 0.09% (double what was achieved in 2016 - 0.04%) and a \$47.08 cost per enrollment (30% less than 2016, \$67).⁷

⁷ Note: Email benchmarks for the Solar Choice Program are: 22-25% open rate, 1.2-1.6% click through rate, 0.03-0.05% enrollment rate. Labor costs excluded in cost per enrollment

Costs:

Applying Year 1 lessons to 2017 marketing efforts, PG&E successfully reduced marketing spend while increasing gross enrollments. PG&E incurred \$576,291 in contract and labor costs in marketing development and execution in accordance with the plans put forth in the Year 2 Marketing Implementation Advice Letter (MIAL). For reference, Year 1 marketing spend was \$1,249,101. PG&E significantly underspent the approved 2017 budget of \$1,329,300, which was submitted in Advice Letter 4936-E in October 2016, and was approved on November 23, 2016.

C. 2018 GTSR External Advisory Board Reviews of Customer Recruitment Plans

PG&E's 2018 marketing plan was shared with PG&E's Solar Choice External Advisory Board during the September 22, 2017 meeting. The presentation provided the advisory board members with a full review of PG&E's proposed marketing plan. The feedback received from advisory board members and others during this meeting was taken into consideration prior to filing the Marketing Implementation Advice Letter (MIAL) on October 20, 2017. PG&E plans to continue to provide an update on the marketing efforts to drive awareness and program enrollments at the planned 2018 External Advisory Board meetings.

D. 2019 Outreach Plan

PG&E plans to file an advice letter in the fourth quarter of 2018 with the 2019 marketing plan and the associated requested budget. The 2019 plan will take into account and make adjustments based on learnings from program enrollment and outreach tactic results to date, utilizing lessons learned during the 2018 program recruitment efforts.

CCA CODE OF CONDUCT REPORT

PG&E did not conduct any marketing efforts that could be reasonably interpreted to be in violation of the CCA Code of Conduct by unfairly targeting CCA customers for enrollment into PG&E's Solar Choice Program. PG&E's efforts to market the program were not targeted to customers in a CCA territory. PG&E did work with Silicon Valley Clean Energy and Redwood Coast Energy Authority on joint letters notifying Solar Choice customers that they were going to be automatically opted in to the CCA and would no longer be on the Solar Choice program. The joint letter explained that if the customer would like to stay on the Solar Choice program they would need to opt out of the CCA.

SUPPLIER DIVERSITY

Through its nationally-recognized Supplier Diversity Program, PG&E has worked for over 35 years to bring more small and diverse women, minority, and service-disabled veteran-owned business enterprises into its supply chain. Within the past few years, lesbian, gay, bisexual, and transgender-owned business enterprises were also added to PG&E's supplier diversity program.

In 2017, PG&E spent \$2.58 billion with small and diverse businesses, representing approximately 42% percent of the company's total procurement spend (\$6.10 billion). PG&E continues to demonstrate its commitment to supplier diversity through outreach, development and partnership in all categories of procurement, including the GTSR Program. In the spring 2017 solicitation, PG&E was pleased to receive one bid from a diverse business and will continue to encourage participation.

CARE ENROLLMENTS RELATED TO ENVIRONMENTAL JUSTICE PROJECTS

PG&E's Solar Choice saw a net enrollment of 235 California Alternate Rates for Energy (CARE) enrolled customers as of December 31, 2017. Of those 235 customers, 68 are located in areas eligible for environmental justice projects. Two of Solar Choice's eight dedicated resource solar projects are eligible environmental justice projects. Both projects are 1 MW in capacity. "Delano Land 1" is located in the city of McFarland in Kern County. "Manteca Land 1 1MW" is located in the city of Manteca in San Joaquin County. Other Solar Choice projects may be located in census tracts designated as eligible for the environmental justice reservation, but those projects are not designated as such either because the bidder did not elect to be considered for that category, or the project was ineligible (e.g. exceeded the 1 MW size cap).

LOW INCOME CUSTOMERS AND CUSTOMERS WHO SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME

In accordance with D.15-01-051, PG&E executed outreach efforts leveraging appropriate targeted tactics such as Community Based Organization events to offer the Solar Choice program to low income customers. PG&E developed a number of enrollment materials in languages other than English (brochures available in Spanish and Chinese) to help non-English speaking customers understand the enrollment opportunity and associated costs for participating in the program. Outreach tactics in market for 2017 reached a small number of low income customers, including 235 CARE enrollments as of December 31, 2017.

REPORTS OF REGIONAL RENEWABLE CHOICE FRAUD OR MISLEADING ADVERTISEMENTS

There were no reports of fraud or misleading advertisements for the Regional Renewable Choice program in 2017.

CONCLUSION

As directed by D.15-01-051, PG&E provides the CPUC and interested parties with this Annual Report of the GTSR Program. This report provides the third full-year Annual Report for the GTSR program, for the period of January 1 to December 31, 2017.