PUBLIC UTILITIES COMMISSION
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SAN FRANCISCO, CA 94102-3298

October 22, 2014

Advice Letter 4355-E

Meredith Allen
Senior Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

SUBJECT: Power Purchase Agreement for Procurement of an Eligible Renewable Energy Resource between RE Astoria, LLC and PG&E

Dear Ms. Allen:

Advice Letter 4355-E is effective as of October 16, 2014, per Resolution E-4692 approved on October 16, 2014.

Sincerely,

Edward Randolph

Edward Randolph
Director, Energy Division

Pacific Gas and Electric Company

Brian K. Cherry
Vice President
Regulatory Relations

Pacific Gas and Electric Company
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February 7, 2014

Advice 4355-E
(Pacific Gas and Electric Company ID U39 E)

Public Utilities Commission of the State of California

Subject: **Power Purchase Agreement for Procurement of an Eligible Renewable Energy Resource between RE Astoria, LLC and Pacific Gas and Electric Company**

I. Introduction

A. Purpose of the advice letter

Pacific Gas and Electric Company ("PG&E") seeks California Public Utilities Commission ("Commission" or "CPUC") approval of a power purchase agreement ("PPA") with RE Astoria, LLC ("RE Astoria"). The PPA is for Renewables Portfolio Standard ("RPS")-eligible energy from a new photovoltaic ("PV") project to be located in Rosamond, California. The PPA has a term of 15 years and is expected to deliver 298 gigawatt-hours ("GWh") per year.

PG&E requests that the Commission issue a resolution no later than August 28, 2014, approving the PPA in its entirety and containing the findings as set forth in Section VI below.

B. Identify the subject of the advice letter, including:

1. Project name

The name of the project is RE Astoria. RE Astoria is a new 100 MW solar PV facility located in Rosamond, California (the "Project").

2. Technology (including level of maturity)

The Project will use crystalline silicon photovoltaic panels, a well-understood technology with decades of performance history, mounted on single axis trackers.

3. General Location and Interconnection Point

The Project is located within California and is expected to interconnect with the California Independent System Operator ("CAISO").

4. Owner(s) / Developer(s)

a. Name(s)

The owner of the Project is RE Astoria, a limited liability company ("LLC"). The developer of the Project is Recurrent Energy, LLC ("Recurrent"). RE Astoria is a wholly owned subsidiary of Recurrent.

b. Type of entity(ies) (e.g. LLC, partnership)

The owner of the Project is an LLC.

c. Business Relationship (if applicable, between seller/owner/developer)

Not applicable.

5. Project background, e.g., expiring QF contract, phased project, previous power purchase agreement, contract amendment

The Project is a new 100 MW Solar PV facility.

6. Source of agreement, i.e., RPS solicitation year or bilateral negotiation

The PPA resulted from PG&E's 2012 RPS Solicitation.

7. If an amendment, describe contract terms being amended and reason for amendment

Not applicable.

C. General Project(s) Description

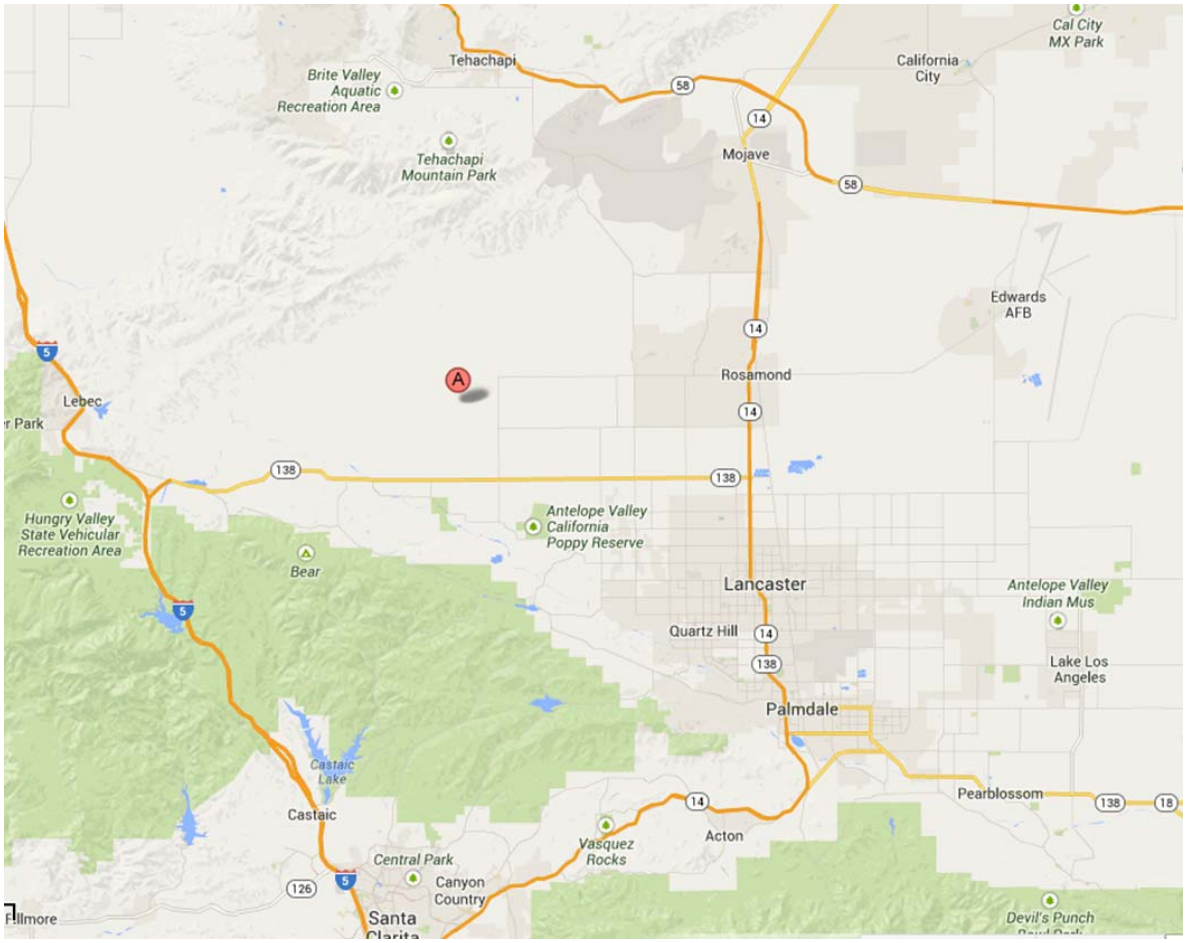
The Projects are described in Section B.1. above. The Transactions are:

Project Name	RE Astoria
Technology	Solar PV
Capacity (MW)	100 MW
Capacity Factor	33.9%
Expected Generation (GWh/Year)	298 GWh
Initial Commercial Operational Date	2019
Date contract Delivery Term begins	2019
Delivery Term (Years)	15
Vintage (New / Existing / Repower)	New facility
Location (city and state)	Rosamond, California
Control Area (e.g., CAISO, BPA)	CAISO

Nearest Competitive Renewable Energy Zone (CREZ) as identified by the Renewable Energy Transmission Initiative (RETI)[1]	Tehachapi
Type of cooling, if applicable	Not applicable

D. Project location

1. Provide a general map of the generation facility's location.



2. For new projects describe facility's current land use type (private, agricultural, county, state lands (agency), federal lands (agency), etc.).

Recurrent represents that the Project is sited on a remote desert area of eastern Kern County on private land consisting of fallow agricultural fields and undisturbed desert habitat within the Desert Renewable Energy Conservation Plan area. Recurrent states that approximately 1,000 acres of the 1,300 acre Project site is located on low-value

[1] Information about RETI is available at: http://www.energy.ca.gov/reti/

disturbed agricultural land. Approximately 280 acres of the Project site is classified as Prime Farmland by the Farmland Mapping and Monitoring Program and the remaining is classified as non-prime by the National Resources Conservation Services.

E. General Deal Structure

Describe general characteristics of contract, for example:

1. Required or expected Portfolio Content Category of the proposed contract

The Project is a 100 MW solar PV facility that is expected to interconnect to the CAISO controlled transmission system, a California balancing authority. Because the Project is an RPS-eligible generator that expects to have its first point of interconnection with the Western Electricity Coordinating Council ("WECC") transmission system within the boundaries of a California balancing authority, the RPS-eligible procurement from the Project satisfies the criteria for the portfolio content category specified in Public Utilities Code Section 399.16(b)(1)(A) (hereinafter "Portfolio Content Category One").

2. Partial/full generation output of facility

PG&E will receive all of the generation output from the Project starting January 3, 2019. The PPA is for the purchase of an as-available product ("Product").

3. Any additional products, e.g. capacity

The Product includes the energy, capacity, and all ancillary products, services or attributes which are or can be produced by or associated with the Project, including, without limitation, Renewable Energy Credits ("RECs"), Capacity Attributes and Green Attributes.

4. Generation delivery point (e.g. busbar, hub, etc.)

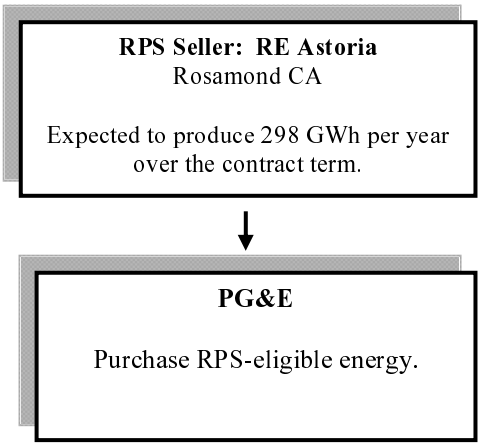
The PPA requires the Project's energy to be delivered to the PNode designated by the CAISO. The delivery market is SP-15.

5. Energy management (e.g. firm/shape, scheduling, selling, etc.)

There is no firming or shaping associated with this PPA. PG&E or its agent will be the Scheduling Coordinator for the Project.

6. Diagram and explanation of delivery structure

Figure 1: Delivery Structure of the PPA



F. RPS Statutory Goals & Requirements

1. Briefly describe the Project's consistency with and contribution towards the RPS program's statutory goals set forth in Public Utilities Code §399.11. These goals include displacing fossil fuel consumption within the state; adding new electrical generating facilities within WECC; reducing air pollution in the state; meeting the state's climate change goals by reducing emissions of greenhouse gases associated with electrical generation; promoting stable retail rates for electric service; a diversified and balanced energy generation portfolio; meeting the state's resource adequacy requirements; safe and reliable operation of the electrical grid; and implementing the state's transmission and land use planning activities.

Public Utilities Code Section 399.11 states that increasing California's reliance on eligible renewable energy resources is intended to displace fossil fuel consumption within the state, promote stable electricity prices, reduce greenhouse gas ("GHG") emissions, improve environmental quality and promote the goal of a diversified and balanced energy generation portfolio. The Project is consistent with these goals because it is a new facility located in the WECC that will generate clean energy and will produce little, if any, GHG emissions directly associated with energy production.

2. Describe how procurement pursuant to the contract will meet IOU's specific RPS compliance period needs. Include Renewable Net Short calculation as part of response.

Senate Bill ("SB") 1078 established the California RPS Program, requiring an electrical corporation to increase its use of eligible renewable energy resources to 20 percent of total retail sales no later than December 31, 2017. The legislature subsequently accelerated the RPS goal to reach 20 percent by the end of 2010. In April 2011,

Governor Brown signed into law SB 2 1X. As implemented by D.11-12-020, SB 2 1X requires retail sellers of electricity to meet the following RPS procurement quantity requirements beginning on January 1, 2011:

- An average of twenty percent of the combined bundled retail sales during the first compliance period (2011-2013).
- Sufficient procurement during the second compliance period (2014-2016) that is consistent with the following formula: (.217 * 2014 retail sales) + (.233 * 2015 retail sales) + (.25 * 2016 retail sales).
- Sufficient procurement during the third compliance period (2017-2020) that is consistent with the following formula: (.27 * 2017 retail sales) + (.29 * 2018 retail sales) + (.31 * 2019 retail sales) + (.33 * 2020 retail sales).
- 33 percent of bundled retail sales in 2021 and all years thereafter.

Consistent with the Energy Division Staff methodology for calculating the renewable net short ("RNS")[2], PG&E provides a RNS calculation in Table 1. PG&E also provides an alternative RNS calculation (the "Alternate RNS") in Table 2. The RNS calculates the volumes that PG&E projects it will need for RPS compliance based on direction provided in the August 2, 2012 Ruling using an "expected case" scenario. The Alternate RNS provides the same calculations as the RNS but substitutes PG&E's internal long-term bundled retail sales forecast for the assumptions provided in the August 2, 2012 ALJ Ruling.

As illustrated by both scenarios, PG&E's existing RPS portfolio is expected to provide sufficient RPS-eligible deliveries to meet PG&E's RPS compliance requirements in the first compliance period (2011 – 2013). Additionally, PG&E expects to exceed the RPS procurement requirement in the second compliance period (2014 – 2016). While the RNS calculations show a slight surplus in the third compliance period, both scenarios show that if RPS-eligible projects in PG&E's portfolio perform as expected, PG&E has fairly significant incremental need beginning in 2020 (prior to applying any excess procurement from earlier compliance periods) and beyond in order to maintain a 33 percent RPS level. This significantly increased need in the early part of the next decade is driven, primarily, by a large volume of expiring contracts in that time frame.

Deliveries to PG&E under the PPA will commence on January 3, 2019. Total deliveries from the Project are expected to average 298 GWh per year. The PPA will therefore contribute toward PG&E's RPS procurement requirements at the end of the third compliance period and beyond when PG&E has a need for new incremental deliveries of RPS-eligible power.

[2] *See* Administrative Law Judge's Ruling (1) Adopting Renewable Net Short Calculation Methodology (2) Incorporating the Attached Methodology into the Record, and (3) Extending the Date for Filing Updates to 2012 Procurement Plans issued on August 2, 2012.

Table 1: Renewable Net Short Calculation as of December 2013

Net Short Calculation Using PG&E Bundled Retail Sales Forecast In Near Term (2013 - 2017) and LTPP Methodology (2018 - 2030)**

Current Expected Need Scenario (Annual)

Line #		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	RPS Target	20.0%	20.0%	20.0%	21.7%	23.3%	25.0%	27%	29%	31%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2	Voluntary Margin of Over-Procurement (GWh)***	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Aggregate Volumes (GWh)	14,833	14,511	17,167	22,054	23,723	24,048	25,375	24,354	23,881	23,265	22,820	20,485	20,151	19,887	19,763	19,158	18,823	18,713	18,104	18,037
4	Annual RPS Position (%)	19.8%	19.0%					32.2%	31.8%	31.1%	30.2%	29.6%	26.5%	26.0%	25.6%	25.4%	24.6%	24.1%	23.9%	23.1%	23.0%
5	Gross Surplus/(Deficit) compared to Annual Targets* (GWh)	(140)	(730)					4,125	2,139	107	(2,132)	(2,626)	(5,013)	(5,397)	(5,713)	(5,888)	(6,545)	(6,931)	(7,092)	(7,753)	(7,872)
6	Non-Bankable Volumes (GWh)	0	15					89	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Volumes (Banked) or Withdrawn from Bank (GWh)	0	0					(4,037)	(2,139)	(107)	2,132	2,626	5,013	5,397	5,713	2,209	0	0	0	0	0
8	Net Surplus/(Deficit) (GWh)	(140)	(730)					89	0	0	0	0	0	0	0	(3,678)	(6,545)	(6,931)	(7,092)	(7,753)	(7,872)
9	Net Annual RPS Positions (%) with Use of Bank	19.8%	19.0%					27.1%	29.0%	31.0%	33.0%	33.0%	33.0%	33.0%	33.0%	28.3%	24.6%	24.1%	23.9%	23.1%	23.0%
10	Cumulative Banked Volumes (GWh)	0	0				16,808	20,845	22,984	23,091	20,959	18,332	13,320	7,923	2,209	0	0	0	0	0	0
11	Forecast Failure Rate (%) for New Projects not yet online	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12	Forecast Failure Rate (%) for Existing Generation	0.0%	0.0%	0.1%	0.7%	0.5%	0.4%	0.4%	0.3%	0.2%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Current Expected Need Scenario (Compliance Period)

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
13	Compliance Period Requirement		20.0%			23.3%				30.0%		33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
14	Voluntary Margin of Over-Procurement (GWh)***		0			0				0		0	0	0	0	0	0	0	0	0	0
15	Aggregate Volumes (GWh)		46,511			69,826				96,874		22,820	20,485	20,151	19,887	19,763	19,158	18,823	18,713	18,104	18,037
16	RPS Position (%)									31.4%		29.6%	26.5%	26.0%	25.6%	25.4%	24.6%	24.1%	23.9%	23.1%	23.0%
17	Gross Surplus/(Deficit) (GWh)									4,239		(2,626)	(5,013)	(5,397)	(5,713)	(5,888)	(6,545)	(6,931)	(7,092)	(7,753)	(7,872)
18	Non-Bankable Volumes (GWh)									89		0	0	0	0	0	0	0	0	0	0
19	Volumes (Banked) or Withdrawn from Bank (GWh)									(4,151)		2,626	5,013	5,397	5,713	2,209	0	0	0	0	0
20	Net Surplus/(Deficit) (GWh)									89		0	0	0	0	(3,678)	(6,545)	(6,931)	(7,092)	(7,753)	(7,872)
21	Net RPS Positions (%)									30.0%		33.0%	33.0%	33.0%	33.0%	28.3%	24.6%	24.1%	23.9%	23.1%	23.0%
22	Cumulative Banked Volumes (GWh)					16,808				20,959		18,332	13,320	7,923	2,209	0	0	0	0	0	0
23	Forecast Failure Rate (%) for New Projects not yet online		0%			0%				0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
24	Forecast Failure Rate (%) for Existing Generation		0.0%			0.5%				0.3%		0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

25	Total RPS Risk Adjusted Net Short (2011-2030) (GWh)	(39,870)

* Assumed annual targets are: 2011-2013 (20% annually), 2014 (21.7%), 2015 (23.3%), 2016 (25%), 2017 (27%), 2018 (29%), 2019 (31%), and 2020 (33%). These targets are illustrative only and not enforceable.

** The 2010 LTPP sales forecast extends only from 2018 through 2020. For purposes of extending this forecast past 2020, PG&E applied a 0.2% annual growth rate to the LTPP's "Adjusted Energy Demand/Consumption" forecast in years after 2020. (This 0.2% growth rate is equal to the average growth rate seen in the LTPP forecast over the 2018-2020 period.) The "Energy Demand/Consumption" amount was then adjusted for line losses to determine bundled retail sales.

*** PG&E considers an adequate bank of surplus RPS procurement to be a voluntary margin of procurement. However, in accordance with Decision 13-11-024, PG&E will not seek in its 2013 RPS Solicitation to procure Portfolio Content Category 2 and 3 RPS products to build and maintain an adequate bank.

Table 2: Alternate Renewable Net Short Calculation as of December 2013

Net Short Calculation Using PG&E Bundled Retail Sales Forecast

Current Expected Need Scenario (Annual)

Line #		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	RPS Target	20.0%	20.0%	20.0%	21.7%	23.3%	25.0%	27%	29%	31%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
2	Voluntary Margin of Over-Procurement (GWh)**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Aggregate Volumes (GWh)	14,833	14,511	17,167	22,054	23,723	24,048	25,375	24,354	23,881	23,265	22,820	20,485	20,151	19,887	19,763	19,158	18,823	18,713	18,104	18,037
4	Annual RPS Position (%)	19.8%	19.0%					32.2%	30.7%	29.9%	29.0%	28.2%	25.1%	24.5%	23.9%	23.6%	22.6%	22.0%	21.6%	20.7%	20.4%
5	Gross Surplus/(Deficit) compared to Annual Targets* (GWh)	(140)	(730)					4,125	1,370	(841)	(3,243)	(3,896)	(6,480)	(7,043)	(7,567)	(7,922)	(8,827)	(9,423)	(9,815)	(10,713)	(11,079)
6	Non-Bankable Volumes (GWh)	0	15					89	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Volumes (Banked) or Withdrawn from Bank (GWh)	0	0					(4,037)	(1,370)	841	3,243	3,896	6,480	7,043	712	0	0	0	0	0	0
8	Net Surplus/(Deficit) (GWh)	(140)	(730)					89	0	0	0	0	0	0	(6,855)	(7,922)	(8,827)	(9,423)	(9,815)	(10,713)	(11,079)
9	Net Annual RPS Positions (%) with Use of Bank	19.8%	19.0%					27.1%	29.0%	31.0%	33.0%	33.0%	33.0%	33.0%	24.8%	23.6%	22.6%	22.0%	21.6%	20.7%	20.4%
10	Cumulative Banked Volumes (GWh)	0	0				16,808	20,845	22,215	21,374	18,131	14,235	7,755	712	0	0	0	0	0	0	0
11	Forecast Failure Rate (%) for New Projects not yet online	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12	Forecast Failure Rate (%) for Existing Generation	0.0%	0.0%	0.1%	0.7%	0.5%	0.4%	0.4%	0.3%	0.2%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Current Expected Need Scenario (Compliance Period)

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
13	Compliance Period Requirement		20.0%			23.3%			30.0%			33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
14	Voluntary Margin of Over-Procurement (GWh)**		0			0			0			0	0	0	0	0	0	0	0	0	0
15	Aggregate Volumes (GWh)		46,511			69,826			96,874			22,820	20,485	20,151	19,887	19,763	19,158	18,823	18,713	18,104	18,037
16	RPS Position (%)								30.5%			28.2%	25.1%	24.5%	23.9%	23.6%	22.6%	22.0%	21.6%	20.7%	20.4%
17	Gross Surplus/(Deficit) (GWh)								1,411			(3,896)	(6,480)	(7,043)	(7,567)	(7,922)	(8,827)	(9,423)	(9,815)	(10,713)	(11,079)
18	Non-Bankable Volumes (GWh)								89			0	0	0	0	0	0	0	0	0	0
19	Volumes (Banked) or Withdrawn from Bank (GWh)								(1,323)			3,896	6,480	7,043	712	0	0	0	0	0	0
20	Net Surplus/(Deficit) (GWh)								89			0	0	0	(6,855)	(7,922)	(8,827)	(9,423)	(9,815)	(10,713)	(11,079)
21	Net RPS Positions (%)								30.0%			33.0%	33.0%	33.0%	24.8%	23.6%	22.6%	22.0%	21.6%	20.7%	20.4%
22	Cumulative Banked Volumes (GWh)					16,808			18,131			14,235	7,755	712	0	0	0	0	0	0	0
23	Forecast Failure Rate (%) for New Projects not yet online		0%			0%			0%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
24	Forecast Failure Rate (%) for Existing Generation		0.0%			0.5%			0.3%			0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

25	Total RPS Risk Adjusted Net Short (2011-2030) (GWh)	(64,635)

*Assumed annual targets are: 2011-2013 (20% annually), 2014 (21.7%), 2015 (23.3%), 2016 (25%), 2017 (27%), 2018 (29%), 2019 (31%), and 2020 (33%). These targets are illustrative only and not enforceable.

**PG&E considers an adequate bank of surplus RPS procurement to be a voluntary margin of procurement. However, in accordance with Decision 13-11-024, PG&E will not seek in its 2013 RPS Solicitation to procure Portfolio Content Category 2 and 3 RPS products to build and maintain an adequate bank.

G. Confidentiality

Explain if confidential treatment of specific material is requested. Describe the information and reason(s) for confidential treatment consistent with the showing required by D.06-06-066, as modified by D.08-04-023.

In support of this Advice Letter, PG&E has provided the confidential information listed below. This information includes the PPA and other information that more specifically describes the rights and obligations of the parties. This information is being submitted in the manner directed by D.08-04-023 and the August 22, 2006, Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with D.06-06-066 to demonstrate the confidentiality of the material and to invoke the protection of confidential utility information provided under either the terms of the IOU Matrix, Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023, or General Order 66-C. A separate Declaration Seeking Confidential Treatment is being filed concurrently with this Advice Letter.

Confidential Attachments:

Appendix A – Consistency with Commission Decisions and Rules and Project Development Status

Appendix B – 2012 Solicitation Overview

Appendix C1 – Independent Evaluator Report (Confidential)

Appendix D – Contract Summary

Appendix E – Comparison of the PPA to PG&E's 2012 Pro Forma Power Purchase Agreement

Appendix F – RE Astoria Power Purchase Agreement

Appendix G – Project's Contribution Toward RPS Goals

Public Attachment

Appendix C2 – Independent Evaluator Report (Public)

II. Consistency with Commission Decisions

A. RPS Procurement Plan

1. Identify the Commission decision that approved the utility's RPS Procurement Plan. Did the utility adhere to Commission guidelines for filing and revisions?

On November 14, 2012, the CPUC issued D.12-11-016, which conditionally approved PG&E's 2012 Renewable Procurement Plan ("2012 RPS Plan"). Consistent with the decision, PG&E submitted a final version of its 2012 RPS Plan on November 29, 2012. In this plan, PG&E stated that it seeks to procure about 1,000 GWh in its 2012 RPS solicitation, with a preference for long-term contracts that qualify as a Portfolio Content Category One product with initial deliveries starting in 2019-2020.

2. Describe the Procurement Plan's assessment of portfolio needs.

The goal of PG&E's 2012 RPS Plan is to procure approximately 1,000 GWh per year of RPS-eligible deliveries offering high portfolio value through new long-term contracts. In addition, based on deliveries from current projects, PG&E does not expect the need for deliveries from new projects until 2020 and beyond.

3. Discuss how the Project is consistent with the utility's Procurement Plan and meets utility procurement and portfolio needs (e.g. capacity, electrical energy, resource adequacy, or any other product resulting from the project).

The Proposed PPA is consistent with PG&E's goal to procure 1,000 GWh per year in the 2012 RPS solicitation. In addition, the Project's 2019 Initial Energy Delivery Date will satisfy PG&E's renewable energy portfolio needs which are projected in 2020 and beyond. Furthermore, because the PPA is long-term, and deliveries from the Project are expected to satisfy the criteria of Portfolio Content Category One, any deliveries in excess of PG&E's portfolio need will be bankable and available for use to satisfy future compliance period needs.

4. Describe the preferred project characteristics set forth in the solicitation, including the required deliverability characteristics, online dates, locational preferences, etc. and how the Project meets those requirements.

The Project is also consistent with PG&E's preferred project characteristics set forth in the 2012 RPS Solicitation. PG&E's 2012 RPS Solicitation Protocol expressed a preference for bundled in-state resources delivering energy and capacity at a delivery point assigned by CAISO inside PG&E's service territory. Except for not being in PG&E's service territory, the Project is consistent with these preferences. The Project will interconnect to the CAISO and PG&E is entitled to all of the Project's Contract Capacity, including Capacity Attributes, from the Project to enable PG&E to meet its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe.

The PPA conforms to PG&E's Commission-approved 2012 RPS Plan by delivering an average of 298 GWh per year to fill a portion of PG&E's RPS net short position. The transaction complies with RPS program requirements, meets the portfolio needs outlined by the 2012 RPS Plan, and meets the majority of the project characteristics set forth in the solicitation. Finally, the PPA is competitive when compared to the other bids submitted in PG&E's 2012 RPS Solicitation and final shortlisted offers.

5. Sales

a) For Sales contracts, provide a quantitative analysis that evaluates selling the proposed contracted amount vs. banking the RECs towards future RPS compliance requirements (or any reasonable other options).

b) Explain the process used to determine price reasonableness, with maximum benefit to ratepayers.

This section is not applicable because the agreement is for the purchase, not sale, of energy.

6. Portfolio Optimization Strategy

a) Describe how the proposed procurement (or sale) optimizes IOU's RPS portfolio (or entire energy portfolio). Specifically, a response should include:

i. Identification of IOU's portfolio optimization strategy objectives that the proposed procurement (or sale) are consistent with.

ii. Identification of metrics within portfolio optimization methodology or model (e.g. PPA costs, energy value, capacity value, interest costs, carrying costs, transaction costs, etc.) that are increased/decreased as a result of the proposed transaction.

iii. Identification of risks (e.g. non-compliance with RPS requirements, regulatory risk, over-procurement of non-bankable RPS-eligible products, safety, etc.) and constraints included in optimization strategy that may be decreased or increased due to proposed procurement (or sale).

The PPA is consistent with PG&E's objectives of achieving and maintaining RPS compliance and minimizing customer costs over time. The PPA helps to meet the objective of filling the net short RPS compliance position through the steady and moderate procurement of cost effective RPS-eligible products through long-term contracts with start dates towards the latter part of the current decade. In order to minimize the total cost impact of the RPS program to customers, Net Market Value ("NMV") and Portfolio Adjusted Value ("PAV") calculations were used to evaluate the transaction's cost for PG&E's customers relative to the forecast market benefits provided by each offer. This transaction reduces the risk of non-compliance with RPS requirements by reducing the net short RPS compliance position beginning in 2019, consistent with PG&E's portfolio needs.

Although the project is not scheduled to deliver to PG&E until 2019, the project is expected to reach commercial operation before the end of 2016 in order to leverage the Investment Tax Credits ("ITC"), which reduces the risk of project non-viability and further helps to minimize customer costs.

b) Description of how proposed procurement (or sale) is consistent with IOU's overall planned activities and range of transactions planned to optimize portfolio.

As stated in the 2012 RPS Plan, PG&E plans to fill the net short RPS compliance position through the steady and moderate procurement of cost effective RPS-eligible products through long-term contracts with start dates towards the latter part of the current decade. This PPA, with an initial delivery date of 2019, is consistent with this approach.

B. Bilateral contracting – if applicable

1. Discuss compliance with D.06-10-019 and D.09-06-050.

2. Specify the procurement and/or portfolio needs necessitating the utility to procure bilaterally as opposed to a solicitation.

3. Describe why the Project did not participate in the solicitation and why the benefits of the Project cannot be procured through a subsequent solicitation.

This section is not applicable because the PPA resulted from PG&E's 2012 RPS Solicitation and not from bilateral negotiations.

C. Least-Cost, Best-Fit (LCBF) Methodology and Evaluation

1. Briefly describe IOU's LCBF Methodology and how the Project compared relative to other offers available to the IOU at the time of evaluation.

PG&E filed its 2012 RPS Shortlist Report on June 7, 2013 in Advice Letter 4238-E, a Supplement to the 2012 RPS Shortlist Report on July 10, 2013 in Advice Letter 4238-E-A, and a second Supplement to the 2012 RPS Shortlist Report on July 15, 2013 in Advice Letter 4238-E-B.

The RPS statute requires PG&E to procure the "least-cost best-fit" ("LCBF") eligible renewable resources.[3] The LCBF decision directs the utilities to use certain criteria in their bid ranking[4] and offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. PG&E's approved process for identifying the LCBF renewable resources focuses on four primary areas:

a. Market Valuation;
b. Portfolio Fit;
c. Project Viability; and
d. RPS Goals.

PG&E examined the reasonableness of the PPA using the LCBF evaluation criteria from the 2012 RPS solicitation. The general finding is that the PPA ranked favorably compared to the other projects received in PG&E's 2012 RPS Solicitation. A more

3 Pub. Util. Code § 399.14(a)(2)(B).

4 D.04-07-029.

detailed discussion of PG&E's evaluation of the PPA is provided in Confidential Appendix A.

a. Market Valuation

In a "mark-to-market analysis," the present value of the bidder's payment stream is compared with the present value of the product's market value to determine the benefit (positive or negative) from the procurement of the resource, irrespective of PG&E's portfolio. This analysis is based on an evaluation of the contract price in the PPA.

The transmission adder adjusts offer prices to include the cost, if any, of bringing the power from the generating facility to PG&E's network. Each bid is associated with a transmission cluster based upon the location of the facility. The costs in the CAISO interconnection study are used for bid evaluation.

PG&E's analysis of the market value and transmission adder is confidential and addressed in Confidential Appendix A.

b. Portfolio Fit

Portfolio fit considers how well an offer's features match PG&E's portfolio needs. PG&E evaluated the offer's consistency with portfolio fit as described in the 2012 RPS Plan and Protocol and filed its initial 2012 RPS Shortlist Report on June 7, 2013.

The Portfolio Adjusted Value ("PAV") intends to more accurately reflect the value of renewable resources to PG&E customers. Specifically, the PAV methodology starts with net market value results, which reflect the value of a transaction relative to market forward curves, as an initial quantitative valuation. Additional quantitative adjustments are then made for aspects of market valuation, transmission adder, and portfolio fit described herein and for other factors that impact the value of a transaction with respect to PG&E's portfolio. Using PG&E's PAV methodology for the 2012 RPS Solicitation, the offer compared favorably to the other 2012 RPS shortlisted offers. Additional information about the PAV methodology is provided in Confidential Appendix A and Advice Letter 4238-E-B.

c. Project Viability

Project viability is based on three categories: 1) Company / Development Team, 2) Technology, and 3) Development Milestones. It is assessed by the CPUC developed Project Viability Calculator ("PVC"). The PVC is a tool for IOUs to evaluate the viability of a renewable energy project, relative to all other projects that bid into the California utilities' RPS solicitations. The PVC uses standardized categories and criteria to quantify a project's strengths and weaknesses in key areas of renewable project development.

PG&E's analysis of Project Viability and PVC score are confidential and can be found in Confidential Appendix A.

d. RPS Goals

PG&E assesses the Offer's consistency with and contribution to California's goals for the RPS program and the Offer's support of PG&E's supplier diversity goals (collectively "RPS Goals"). The RPS Goals assessment considers non-quantitative

factors, legislative findings, and declarations that increase California's reliance on renewable energy, consistency with the CPUC's Water Action Plan, Executive Order S-06-06 which established a goal the state would meet 20% of its renewable energy needs with electricity produced from biomass, and supplier diversity.

2. Indicate when the IOU's Shortlist Report was approved by Energy Division.

The 2012 Shortlist Report was approved by Resolution E-4631 on December 19, 2013.

D. Compliance with Standard Terms and Conditions (STCs)

1. Does the proposed contract comply with D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025?

The Commission set forth standard terms and conditions to be incorporated into contracts for the purchase of electricity from eligible renewable energy resources in D.04-06-014 and D.07-02-011, as modified by D.07-05-057 and D.07-11-025. These terms and conditions were compiled and published in D.08-04-009. Additionally, the non-modifiable term related to Green Attributes was finalized in D.08-08-028 and the non-modifiable terms related to RECs were finalized in D.10-03-021, as modified by D.11-01-025.

The non-modifiable standard terms and conditions in the PPA conform exactly to the "non-modifiable" terms set forth in Attachment A of D.08-04-009, as modified be D.08-08-028 and by Appendix C of D.10-03-021, as modified by D.11-01-025.

2. Using the tabular format, provide the specific page and section number where the RPS non-modifiable STCs are located in the contract.

The locations of non-modifiable terms in the PPA are indicated in the table below:

Non-Modifiable Term	Contract Section Number	Contract Page Number
STC 1: CPUC Approval	1.42	4 – 5
STC 2: Green Attributes and RECs		
• Definition of Green Attributes	1.117	12
• Conveyance of Green Attributes	3.2	32
STC 6: Eligibility	10.2(b)	57
STC 17: Applicable Law	10.12	64
STC REC 1: Transfer of RECs	10.2(b)	57
STC REC 2: WREGIS Tracking of RECs	3.1(k)(viii)	29

3. Provide a redline of the contract against the utility's Commission-approved pro forma RPS contract as Confidential Appendix E to the filed advice letter. Highlight modifiable terms in one color and non-modifiable terms in another.

A redline comparison of the PPA with PG&E's 2012 Pro Forma PPA is provided Confidential Appendix E.

E. Portfolio Content Category Claim and Upfront Showing (D.11-12-052, Ordering Paragraph 9)

1. Describe the contract's claimed portfolio content category.

As described in Section I.E and in further detail below, the PPA satisfies the upfront showing required for Portfolio Content Category One.

2. Explain how the procurement pursuant to the contract is consistent with the criteria of the claimed portfolio content category as adopted in D.11-12-052.

SB 2 1X, which is codified at Public Utilities Code Sections 399.11, and following, established three portfolio content categories that apply to RPS-eligible generation associated with RPS procurement contracts signed after June 1, 2010. D.11-12-052 requires that IOUs make an upfront showing related to the categorization of each proposed RPS procurement transaction. Specifically, for approval of contracts meeting the criteria of Portfolio Content Category One, an IOU may show the RPS-eligible generator has its first point of interconnection with the WECC transmission system within the boundaries of a California balancing authority area.

The Project meets the upfront showing required for Portfolio Content Category One because it is an in-state RPS-eligible renewable resource that expects to have its first point of interconnection with the WECC transmission system with the CAISO, a California balancing authority. Therefore, the RPS-eligible procurement from the Project satisfies the criteria for Portfolio Content Category One adopted in D.11-12-052.

3. Describe the risks that the procurement will not be classified in the claimed portfolio content category.

There is no known risk that the electric power would not be categorized as Portfolio Content Category One.

4. Describe the value of the contract to ratepayers if:

1. Contract is classified as claimed

2. Contract is not classified as claimed

The value of the PPA, as described and assessed in this Advice Letter, is based on the assumption that the procurement meets the criteria of Portfolio Content Category One. If the PPA is not classified as Portfolio Content Category One, its value to PG&E and its customers would be lower. For example, if PG&E (i) exceeds the applicable portfolio balance requirements set forth in Public Utilities Code Section 399.16(c)(2); and (ii) has excess procurement in that compliance period, D.12-06-038 would require any RECs

from the Project exceeding the portfolio balance requirements to be deducted from the surplus. If the RECs from the Project were classified as Portfolio Content Category Three, they would be more expensive than available REC-only purchase opportunities.

5. Use the table below to report how the procurement pursuant to the contract, if classified as claimed, will affect the IOU's portfolio balance requirements, established in D.11-12-052.

Per PG&E's 2012 Preliminary Annual 33 percent RPS Compliance Report, amended and filed on November 15, 2013, PG&E's current Portfolio Balance Requirements are listed in the table below.

Forecast of Portfolio Balance Requirements	Compliance Period 2 (2014-2016)	Compliance Period 3 (2017-2020)
PCC 1 Balance Requirement *CP 2 = 65% of RECs applied to procurement quantity requirement* *CP 3 = 75% of RECs applied to procurement quantity requirement*		
Quantity of PCC 1 RECs (under contract, not including proposed contract)	13,598 GWh	26,374 GWh
Quantity of PCC 1 RECs from proposed contract	0	614 GWh
Quantity of PCC 2 RECs	0	0
Quantity of PCC 2 RECs (under contract, not including proposed contract)	0	0
Quantity of PCC 2 RECs from proposed contract	0	0
PCC 3 Balance Limitation *CP 2 = 15% of RECs applied to procurement quantity requirement* *CP 3 = 10% of RECs applied to procurement quantity requirement*		
Quantity of PCC 3 RECs	0[5]	0[6]

[5] PG&E has 34.5 GWh under contract pursuant to three PCC3 REC purchase agreements that are not yet effective because they are pending CPUC approval.

[6] PG&E has 46 GWh under contract pursuant to three PCC3 REC purchase agreements that are not yet effective because they are pending CPUC approval.

(under contract, not including proposed contract)		
Quantity of PCC 3 RECs from proposed contract	0	0

F. Long-Term Contracting Requirement

D.12-06-038 established a long-term contracting requirement that must be met in order for an IOU to count RPS procurement from contracts less than 10 years in length ("short-term contracts") toward RPS compliance.

1. **Explain whether or not the proposed contract triggers the long-term contracting requirement.**
2. **If the long-term contracting requirement applies, provide a detailed calculation that shows the extent to which the utility has satisfied the long-term contracting requirement. If the requirement has not yet been satisfied for the current compliance period, explain how the utility expects to satisfy the quantity by the end of the compliance period to count the proposed contract for compliance.**

In D.12-06-038, the Commission adopted a threshold standard pursuant to SB 2 1X that requires load serving entities to sign long-term contracts in each compliance period equal to at least 0.25 percent of their expected retail sales over that same compliance period. The proposed PPA is a long-term 15-year contract that does not trigger the minimum quantity requirement set forth in D.12-06-038.

G. Tier 2 Short-term Contract "Fast Track" Process – if applicable

1. **Is the facility in commercial operation? If not in commercial operation, explain the IOU's basis for its determination that commercial operation will be achieved within the required six months.**
2. **Describe and explain any contract modifications to the Commission-approved short-term pro forma contract.**

PG&E is not submitting the PPA under the "Fast Track" process.

H. Interim Emissions Performance Standard

In D.07-01-039, the Commission adopted a greenhouse gas Emissions Performance Standard (EPS) which is applicable to electricity contract for baseload generation, as defined, having a delivery term of five years or more.

1. Explain whether or not the contract is subject to the EPS.

A greenhouse gas Emissions Performance Standard ("EPS") was established by Senate Bill 1368 ("SB 1368"), which requires that the Commission consider emissions costs associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers.

To implement SB 1368, in D.07-01-039, the Commission adopted an EPS that applies to contracts for a term of five or more years for baseload generation with an annualized plant capacity factor of at least 60 percent. The PPA is not a covered procurement subject to the EPS because the generating facility has a forecast annualized capacity factor of less than 60 percent and therefore is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim EPS Rules.

Notification of compliance with D.07-01-039 is provided through this Advice Letter, which has been served on the service list in the RPS rulemaking, R.11-05-005.

2. If the contract is subject to the EPS, discuss how the contract is in compliance with D.07-01-039.

See Section H.1 above.

3. If the contract is not subject to EPS, but delivery will be firmed/shaped with specified baseload generation for a term of five or more years, explain how the energy used to firm/shape meets EPS requirements.

Not applicable.

4. If the contract term is five or more years and will be firmed/shaped with unspecified power, provide a showing that the utility will ensure that the amount of substitute energy purchases from unspecified resources is limited such that total purchases under the contract (renewable and non-renewable) will not exceed the total expected output from the renewable energy source over the term of the contract.

Not applicable.

5. If substitute system energy from unspecified sources will be used, provide a showing that:

a. the unspecified energy is only to be used on a short-term basis; and

b. the unspecified energy is only used for operational or efficiency reasons; and

c. the unspecified energy is only used when the renewable energy source is unavailable due to a forced outage, scheduled maintenance, or other temporary unavailability for operational or efficiency reasons; or

d. the unspecified energy is only used to meet operating conditions required under the contract, such as provisions for number of start-ups, ramp rates, minimum number of operating hours.

Not applicable.

I. Procurement Review Group (PRG) Participation

1. List PRG participants (by organization/company).

The Procurement Review Group ("PRG") for PG&E includes the Commission's Energy Division and Office of Ratepayer Advocates, Department of Water Resources, Union of Concerned Scientists, The Utility Reform Network, the California Utility Employees, and Jan Reid, as a PG&E ratepayer.

2. Describe the utility's consultation with the PRG, including when information about the contract was provided to the PRG, whether the information was provided in meetings or other correspondence, and the steps of the procurement process where the PRG was consulted.

The PPA was presented to the PRG as part of PG&E's proposed shortlist on March 27, 2013. The transaction was subsequently presented to the PRG as a potential contract for execution on November 12, 2013. Additional information is provided in Confidential Appendix A.

3. For short-term contracts, if the PRG was not able to be informed prior to filing, explain why the PRG could not be informed.

Not applicable

J. Independent Evaluator (IE)

The use of an IE is required by D.04-12-048, D.06-05-039, 07-12-052, and D.09-06-050.

1. Provide name of IE.

The Independent Evaluator is Lewis Hashimoto from Arroyo Seco Consulting.

2. Describe the oversight provided by the IE.

The IE reviewed and assessed PG&E's RPS evaluation and selection process, and observed the negotiations of the PPA to ensure that they were conducted fairly.

3. List when the IE made any findings to the Procurement Review Group regarding the applicable solicitation, the project/bid, and/or contract negotiations.

The IE provided insights and findings to the PRG during the PRG meetings noted in Section I above.

4. Insert the public version of the project-specific IE Report.

The public version of the IE report is attached to this Advice Letter as Appendix C2.

III. Project Development Status

A. Company / Development Team

1. Describe the Project development team and/or company principals and describe how many years of experience they have had on the development side of the electric industry.

Recurrent's leadership team brings a track record of solar and energy project experience with companies such as Calpine, Exelon, Babcock & Brown, and SunPower. Recurrent has an experienced development team and has a global pipeline of over 2 GW with over 700 MW under contract. Recurrent currently has over 400 MW in operation and expects to bring an additional 235 MW online by the end of 2014.

2. List any successful projects (renewable and conventional) the Project development team and/or company principals have owned, constructed, and/or operated.

Projects Developed by Recurrent

Project / Program	Type	Contracted MW	Status
Rooftop Portfolio	Commercial	2	Operating
Spanish Rooftop Portfolio	Utility	5	Operating
SFPUC Reservoir	Utility	5	Operating
Kaiser Portfolio	Commercial	11	Operating
North East Utility	Utility	6	Operating
Arizona Utility	Utility	22	Operating
SMUD	Utility	88	Operating
PG&E PV Program	Utility	27	Operating
SCE RSC 2009	Utility	26	Operating
Ontario FIT	Utility	220	Operating / Under Construction
SCE RSC 2009	Utility	48	Operating
SCE RSC 2010	Utility	11	Operating
City of Santa Clara	Utility	26	Operating
Arizona Utility	Utility	20	Operating
PG&E PV Program II	Utility	26	Pre-Construction
SCE RAM II	Utility	25	Pre-Construction

PG&E 2011 RFO	Utility	27	Pre-Construction
PG&E RAM III	Utility	27	Pre-Construction
CDWR	Utility	59	Pre-Construction
SCE RAM III	Utility	26	Pre-Construction
Total Operating		**415**	
Total Operating + Contracted		**706**	

B. Technology

1. Technology Type and Level of Technology Maturity

a. Discuss the type and stage of the Project's proposed technology (e.g. concept state, testing stage, commercially operating, utility-scale operation, ample history of operation).

The Project will use crystalline silicon PV panels, mounted on single-axis trackers. Crystalline silicon PV is a mature, proven, widely installed and regularly financed solar generation technology solution. The Project will use modules, inverters, and trackers that are all field-proven and deemed financeable by third-party financiers. Several utility scale projects using similar technology are in operation worldwide.

b. If the technology has not been commercially demonstrated, identify whether the developer has or plans to have a demonstration project. Describe the project (MW, hours run), its results (e.g., temperature, GWh, or other appropriate metric) and its ability to perform on a commercial scale.

The technology has been commercially demonstrated; therefore, this section is not applicable.

c. If hybrid technology will be deployed, describe the configuration and potential issues and/or benefits created by the hybrid technology.

The technology proposed is not a hybrid technology; therefore, this section is not applicable.

2. Quality of Renewable Resource

a. Explain the quality of the renewable resource that the Project will rely upon. Provide supporting documentation, such as project-specific resource studies, reports from RETI or the National Renewable Energy Lab (NREL) that supports resource quality claims and ability for the facility to provide expected generation.

The solar resource in the area of the Project is generally considered good for solar energy generation. The solar resource was modeled using a third-party solar modeling application, PVSyst V5.60 ("PVSyst"). PVSyst used meteorological solar resource data from appropriate weather stations, module specifications for a Tier 1 manufacturer and time of day orientation provided by single axis tracking to calculate the average amount of energy expected to be generated by the Project.

b. For biomass projects, please provide a fuel resource analysis and the developer's fuel supply plan. Identify:

i. From whom/where the fuel is being secured; and

ii. Where the fuel is being stored

Not applicable.

c. Explain whether the IOU believes that the Project will be able meet the terms of the contract given its independent understanding of the quality of the renewable resource. If necessary, reference successful nearby projects, completed studies, and/or other information.

PG&E believes that the Project will be able to meet the terms of the contract as the solar data and modeling software used to calculate expected generation are industry standard.

3. Other Resources Required

a. Identify any other fuel supply (other than the renewable fuel supply discussed above) necessary to the Project and the anticipated source of that supply;

There is no other fuel supply necessary.

b. Explain whether the developer has secured the necessary rights for water, fuel(s), and any other required inputs to run the Project.

Solar PV technology does not require water for the electricity generation process. Rather, water is used only for panel washings. Recurrent indicates that water rights will be secured upon selection of the Engineering Procurement and Construction ("EPC") provider. No other significant operational inputs are required.

c. Provide the estimated annual water consumption of the facility (gallons of water/year).

The Project will require approximately 7.598 acre-feet, or roughly 2.48 million gallons, of water per year, which would primarily be used for panel washing.

d. Explain whether the IOU believes that the Project will be able meet the terms of the contract given its independent understanding of the adequacy of the additional fuel or any other necessary resource supply. If necessary, reference successful nearby projects, completed studies, and/or other information.

PG&E expects the Project to meet the terms of the PPA given the adequacy of the solar resource.

C. Development Milestones

1. Site Control

Explain the status of Project site control, including:

a. Site control type (e.g. ownership, lease, BLM Right-of-Way grant, etc.)

i. If lease, describe duration of site control and any exercisable extension options

ii. Level or percent of site control attained – if less than 100%, discuss seller's plan for obtaining full site control

There is sufficient land under site control via option to purchase agreements to accommodate the 100 MW of RE Astoria to be contracted with PG&E. RE Astoria holds firm site control on over 90% of the gen-tie route. See Confidential Appendix A for additional information.

2. Equipment Procurement

Explain the status of equipment procurement for the Project, including:

a. The status of the procurement of major equipment (e.g. equipment in-hand, contracts executed and equipment in delivery, negotiating contracts with supplier(s), etc.). For equipment not yet procured, explain any contingencies and overall timing.

The Project will begin procuring equipment after closing financing for the Project. The Project will launch a series of competitive selection processes to procure all major equipment and services needed to achieve the commercial operation date under the PPA.

b. The developer's history of ability to procure equipment.

Recurrent's history of being able to procure equipment either directly or through EPC contractors is demonstrated by the projects they have online or in construction shown in the table in Section III.A.

c. Any identified equipment procurement issues, such as lead time, and their effect on the Project's date of operability.

At this time, Recurrent does not anticipate any equipment procurement issues. Recurrent will continue to monitor lead times for major equipment and adjust Project schedule to secure an EPC agreement as necessary to achieve the commercial operation under the PPA.

3. Permitting / Certifications Status

a. Describe the status of the Project's RPS-eligibility certification from the CEC. Explain if there is any uncertainty regarding the Project's eligibility.

The Project has been Pre-Certified by the CEC and assigned certification number 62284C.

b. Use the following table to describe the status of all major permits or authorizations necessary for development and operation of the Project, including, without limitation, CEC authorizations, air permits, certificates of public convenience and necessity (CPCN) or permits to construct (PTC) for transmission, distribution, or substation construction/ expansion, land use permits, building permits, water use or discharge authorizations, Federal Aviation Administration authorizations, military authorizations, and Federal Communication Commission authorizations. If necessary, table may be split between public and confidential sections – permits requests with public agencies should be included in the public portion.

Name of Permit or Lease required	Grantor	Description of Permit or Lease	Current Status (to be filed, pending approval, approved)	Projected timeframe for approval
EIR Certification/ Conditional Use Permit ("CUP")	Kern County	Permits the construction and operation of the Project	Pending approval	September 2014
Building and Grading Permits	Fresno County Building Department	A permit required to begin construction of the Project. Includes review of design drawings, storm water pollution	To be filed	To be issued prior to construction start

		prevention plan and compliance with CUP requirements.		
Steambed Alteration Agreement	California Department of Fish and Wildlife	A permit required for any action that substantially diverts or obstructs the natural flow or changes the bed, channel, or bank of any river, stream, or lake, or uses materials from a streambed must be previously authorized by DFW via a Lake or Streambed Alteration Agreement under Section 1603.	To be filed	To be executed after the EIR Certification
General Permit for Discharges of Storm Water	Lahontan Regional Water Quality Control	A permit that covers storm water discharges associated with both small and large construction activity.	To be filed	To be issued prior to construction start
Waste Discharge Requirements Permit	Lahontan Regional Water Quality Control	A permit that covers the discharge of waste into surface water or groundwater.	To be filed	To be executed after EIR certification and prior to construction start

4. Production Tax Credit (PTC) / Investment Tax Credit (ITC) / Other government funding– if applicable

a. Explain the Project's potential eligibility for tax credits or other government funding based on the technology of the Project and contract operation date.

The Project is eligible for the ITC. Under current U.S. tax law, the Project is required to reach commercial operation before the end of 2016.

b. If the developer is pursuing PTCs/ITCs/Other, explain the criteria that must be met and the developer's plans for obtaining the PTCs/ITCs/Other.

The main criterion to avail the ITC under current U.S. tax law is for the Project to reach commercial operation prior to December 31, 2016. Once the Project is in service, it will submit a tax return to the Internal Revenue Service, which will include a description of the Project costs eligible for the ITC. The ITC is 30% of the eligible Project costs.

c. Explain whether the utility or the seller bears the risk if the anticipated tax credits/funding are not obtained.

The Seller bears the risk if the ITC is not obtained.

5. Transmission

a. Discuss the status of the Project's interconnection application, whether the Project is in the CAISO or any other interconnection queue, and which transmission studies are complete and/or in progress.

Details are described in Confidential Appendices A and D.

b. Discuss the status of the Interconnection Agreement with the interconnecting utility (e.g., draft issued, executed and at FERC, fully approved).

Details are described in Confidential Appendix A.

c. Describe the required network and gen-tie upgrades and the capacity to be available to the Project upon completion, including any proposed curtailment schemes.

Details are described in Confidential Appendix A.

d. Describe any required substation upgrades or construction.

Details are described in Confidential Appendix A.

e. Discuss the timing and process for all transmission-related upgrades. Identify critical path items and potential contingencies in the event of delays.

Details are described in Confidential Appendix A.

f. Explain any issues relating to other generating facility projects in the transmission queue as they may affect the Project.

Details are described in Confidential Appendix A.

g. If the Project is dependent on transmission that is likely to be congested at times, leading to a product that is less than 100% deliverable for at least several years, explain how the utility factored the congestion into the LCBF bid analysis.

Expectations regarding congestion are factored into the quantitative analysis through the use of Locational Marginal Price ("LMP") multipliers.

h. Describe any alternative transmission arrangements available and/or considered to facilitate delivery of the Project's output.

Not Applicable.

D. Financing Plan

1. Explain developer's manner of financing (e.g. project financing, balance sheet financing, utility tax equity investment, etc.).

Details are described in Confidential Appendix A.

2. Describe the developer's general project financing status.

Details are described in Confidential Appendix A.

3. To what extent (%) has the developer received firm commitments from financers (both debt and equity), and how much financing is expected to be needed to bring the Project online?

Given the Project's 2019 contractual commercial operation date, the Project does not have firm commitments from financiers at this time. Recurrent's project finance team will begin outreach to project financiers in time to support project construction deadlines. Recurrent is confident in its ability to secure construction debt for the Project.

4. List any government funding or awards received by the Project.

The Project has not received any government funding or awards. The Project expects to qualify for the federal energy ITC program by coming online prior to December 31, 2016.

5. Explain the creditworthiness of all relevant financiers.

Recurrent works with global project finance institutions in non-recourse project finance lending. These institutions are active in the market and have investment grade credit ratings.

6. Describe developer's history of ability to procure financing.

The following table details selected project financings that demonstrate Recurrent's ability to procure financing.

Date	Project	Size	Amount	Detail
April 2010	Kaiser Permanente	11 MW	See Confidential Appendix A	See Confidential Appendix A
July 2010	Sunset Reservoir	5 MW	See Confidential Appendix A	See Confidential Appendix A
December 2010	Arizona Utility Portfolio	22 MW	See Confidential Appendix A	See Confidential Appendix A

August 2011	SMUD Portfolio (4 sites)	88 MW	See Confidential Appendix A	See Confidential Appendix A
December 2011	Ontario Portfolio (20 projects)	200 MW	See Confidential Appendix A	See Confidential Appendix A
April 2012	PG&E Project	26 MW	See Confidential Appendix A	See Confidential Appendix A
February 2013- June 2013	7 CA Projects	131 MW	See Confidential Appendix A	See Confidential Appendix A
May 2013	Ontario Portfolio (10 Projects)	108 MW	See Confidential Appendix A	See Confidential Appendix A

7. Describe any plans for obtaining subsidies, grants, or any other third party monetary awards (other than Production Tax Credits and Investment Tax Credits) and discuss how the lack of any of this funding will affect the Project.

The Project does not contemplate the use of any subsidies, grants or other third party monetary awards.

IV. Contingencies and/or Milestones

Describe major performance criteria and guaranteed milestones, including those outside the control of the parties, including transmission upgrades, financing, and permitting issues.

The PPA includes certain performance criteria and milestones that PG&E includes in its form RPS PPA contracts. These and other contingencies and milestones are addressed in Confidential Appendices A and D. The terms of the PPA are conditioned on the occurrence of CPUC Approval, as it is defined in the PPA.

V. Safety Considerations

1. What terms in the PPA address the safe operation, construction and maintenance of the Project? Are there any other conditions, including but not limited to conditions of any permits or potential permits, that the IOU is aware of that ensure such safe operation, construction and decommissioning?

Local, state and federal agencies that have review and approval authority over the Project are charged with enforcing safety, environmental and other regulations for the Project,

including decommissioning. Section 3.9(a) of the PPA requires Seller to "acquire all permits and other approvals necessary for the construction, operation and maintenance of the Project." Moreover, PG&E requires that the Project abide by contractual obligations in the PPA that require certain Standards of Care (Section 3.5) and Covenants (Section 10.3) to not violate applicable laws, rules and regulations. These provisions serve to: (1) clarify that the burden of safe operations resides with the seller, the entity with control over on-site decisions, and (2) protect PG&E customers against bearing the cost of imprudent or unsafe operations. They do not provide PG&E with rights to enforce or dictate safe operations of the Project as those rights reside with the governmental authorities with safety and permitting oversight over the Project.

2. **What has the IOU done to ensure that the PPA and the Project's operation are: consistent with Public Utilities Code Section 451; do not interfere with the IOU's safe operation of its utility operations and facilities; and will not adversely affect the public health and safety?**

The Project is owned, constructed and operated by a third party. As explained in Section V.1, the Seller is obligated to own and operate the Project in accordance with the laws, rules, and regulations and apply to it, a number of which are referenced in the PPA to clarify that the burden of safe operations, including operations that impact public safety, lies with the Seller. PG&E's safe operation of its utility operations and facilities is addressed in the interconnection process. While interconnection safety is not specified in the PPA, under the terms of the PPA, PG&E will declare that the Projects have commenced deliveries under the PPA only after PG&E, as the transmission operator, and the CAISO have concluded such testing and given permission to commence commercial operations.

3. **If PPA or amendment is with an existing facility, please provide a matrix that identifies all safety violations found by any entity, whether government, industry-based or internal with an indication of the issue and if the resolution of that alleged violation is pending or resolved and what the progress or resolution was/is.**

Not applicable. The PPA is for a new facility.

4. **If PPA or amendment is with an existing facility, will the PPA or amendment lead to any changes in the structure or operations of the facility? Any change in the safety practices at the facility? If so, with what federal, state and local agencies did the developer confer or seek permits or permit amendments for these changes?**

Not applicable. The PPA is for a new facility.

VI. REQUEST FOR COMMISSION APPROVAL

PG&E requests that the Commission issue a resolution no later than August 28, 2014, that:

1. Approves the PPA in its entirety, including payments to be made by PG&E pursuant to the PPA, subject to the Commission's review of PG&E's administration of the PPA.
2. Finds that any procurement pursuant to the PPA is procurement from eligible renewable energy resources for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California RPS (Public Utilities Code Section 399.11 et seq.), D.03-06-071, D.06-10-050, D.11-12-020, D.11-12-052 or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code Section 399.13(g), associated with the PPA shall be recovered in rates.
4. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:
    a. The PPA is consistent with PG&E's 2012 RPS procurement plan.
    b. The terms of the PPA, including the price of delivered energy, are reasonable.
5. Adopts the following finding of fact and conclusion of law in support of cost recovery for the PPA:
    a. The utility's costs under the PPA shall be recovered through PG&E's Energy Resource Recovery Account.
    b. Any stranded cost that may arise from the PPA is subject to the provisions of D.04-12-048 that authorize recovery of stranded renewables procurement costs over the life of the contract. The implementation of the D.04-12-048 stranded cost recovery mechanism is addressed in D.08-09-012.
6. Adopts the following findings with respect to resource compliance with the EPS adopted in R.06-04-009:
    a. The PPA is not a form of covered procurement subject to the EPS, because the generating facility has an expected capacity factor of less than 60 percent and, therefore, is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the adopted Interim EPS Rules.
7. Adopts a finding of fact and conclusion of law that deliveries from the PPA shall be categorized as procurement under the portfolio content category specified in Public Utilities Code Section 399.16(b)(1)(A), subject to the Commission's after-the-fact verification that all applicable criteria have been met.

Protests:

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than **February 27, 2014**, which is 20 days after the date of this filing. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry
Vice President, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-7226
E-mail: PGETariffs@pge.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Rule 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Rule 3.11).

Effective Date:

PG&E requests that the Commission issue a resolution approving this Tier 3 advice filing by August 28, 2014.

Notice:

In accordance with General Order 96-B, Section IV, a copy of this Advice Letter excluding the confidential appendices is being sent electronically and via U.S. mail to

parties shown on the attached list and the service lists for R.11-05-005, and R.12-03-014. Non-market participants who are members of PG&E's Procurement Review Group and have signed appropriate Non-Disclosure Certificates will also receive the Advice Letter and accompanying confidential attachments by overnight mail. Address changes to the General Order 96-B service list should be directed to PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Advice letter filings can also be accessed electronically at http://www.pge.com/tariffs.

Vice President, Regulatory Relations

cc: Service List for R.11-05-005
Service List for R.12-03-014
Paul Douglas – Energy Division
Jason Simon – Energy Division
Shannon O'Rourke – Energy Division
Joseph Abhulimen – ORA
Karin Hieta – ORA
Cynthia Walker – ORA

Limited Access to Confidential Material:

The portions of this Advice Letter marked Confidential Protected Material are submitted under the confidentiality protection of Sections 583 and 454.5(g) of the Public Utilities Code and General Order 66-C. This material is protected from public disclosure because it consists of, among other items, the PPA itself, price information, and analysis of the proposed PPA, which are protected pursuant to D.06-06-066 and D.08-04-023. A separate Declaration Seeking Confidential Treatment regarding the confidential information is filed concurrently herewith.

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:	Contact Person: **Anupama Vege and Shirley Wong**
☑ ELC ☐ GAS	Phone #: **(415) 973-7600 and (415) 972-5505**
☐ PLC ☐ HEAT ☐ WATER	E-mail: **PGETariffs@pge.com, a1vb@pge.com and slwb@pge.com**

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas ☐
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **4355-E** **Tier: 3**

Subject of AL: **Power Purchase Agreement for Procurement of an Eligible Renewable Energy Resource between RE Astoria, LLC and Pacific Gas and Electric Company**

Keywords (choose from CPUC listing): **Contract, Portfolio**

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: **Yes. Please see the attached confidentiality matrix that identifies all of the confidential information**

Confidential information will be made available to those who have executed a nondisclosure agreement: **Yes. All members of PG&E's Procurement Review Group who have signed a nondisclosure agreement will receive the confidential information.**

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: **Gillian Clegg, (415) 973-1332**

Resolution Required? ☑ Yes ☐No

Requested effective date: **By August 28, 2014** No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed:

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
ED Tariff Unit
505 Van Ness Ave., 4th Floor
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Brian K. Cherry, Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

Public Appendix C2

Independent Evaluator Report

ARROYO SECO CONSULTING

PACIFIC GAS AND ELECTRIC COMPANY 2012 RENEWABLE POWER SOLICITATION

REPORT OF THE INDEPENDENT EVALUATOR ON A CONTRACT WITH RE ASTORIA, LLC

FEBRUARY 4, 2014

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This report provides an independent evaluation of the process by which the Pacific Gas and Electric Company (PG&E) undertook a competitive solicitation in 2013[1] to procure energy eligible to meet Renewables Portfolio Standard (RPS) goals. An independent evaluator (IE), Arroyo Seco Consulting (Arroyo), conducted a range of activities to review, test, and check PG&E's processes as the utility conducted outreach to renewable power developers and operators, solicited Offers, evaluated Offers, and selected a short list of Offers with which to pursue negotiations.

Subsequent to the selection of a short list, PG&E negotiated with the selected Participants to seek agreement on the terms of contracts for renewable power. On December 16, 2013, PG&E executed a Power Purchase Agreement (PPA) for renewable energy with RE Astoria, LLC, currently a wholly-owned subsidiary of Recurrent Energy, Inc. ("Recurrent") of San Francisco, which itself is a wholly-owned subsidiary of Sharp Electronics, an electronics manufacturing company headquartered in Osaka, Japan. RE Astoria will comprise a 100-MW solar photovoltaic generation project to be constructed in the Mojave Desert about 20 miles west of Rosamond, in Kern County adjacent to the Los Angeles County line.

The purpose of this report is to provide an independent review of the extent to which the project-specific negotiations with RE Astoria were fair, and an opinion about whether this contract merits approval by the California Public Utilities Commission (CPUC).

The structure of this report follows the 2012 RPS Shortlist Report Template provided by the Energy Division of the CPUC. Topics covered include:

- The role of the IE;
- Adequacy of outreach for and robustness of the 2012 competitive solicitation;
- The fairness of the design of PG&E's least-cost, best-fit (LCBF) methodology;
- The fairness of PG&E's administration of its LCBF methodology;[2]
- Fairness of project-specific negotiations; and
- Merit of the contract for CPUC approval.

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[1] While the Offers were due on February 6, 2013 and were evaluated in 2013, the solicitation was issued on December 10, 2012 and is considered to be a 2012 Request for Offers.

[2] The first chapter is a summary of the IE report prepared in June 2013 that accompanied PG&E's short list for its 2012 RPS solicitation.

Arroyo's opinion is that the negotiations between PG&E and Recurrent for the RE Astoria contract were conducted fairly with respect to ratepayers and competitors.

Arroyo ranks the RE Astoria contract as high in valuation and low in contract price. Arroyo's assessment is that the contract's portfolio fit with PG&E's compliance needs ranks as moderate to high. The project viability of the contract ranks as moderate based on Arroyo's scoring with the Energy Division's Project Viability Calculator.

Arroyo's opinion is that the RE Astoria agreement merits CPUC approval based on its attractively low price and high value; the contract's fit with PG&E's supply portfolio and the proposed project's expected viability seem entirely acceptable.

1. SUMMARY OF FINDINGS FROM THE SHORT LIST REPORT

Pacific Gas and Electric Company issued a Request for Offers (RFO) on December 10, 2012, a competitive solicitation for power generation qualifying as eligible renewable energy resources (ERRs). In its solicitation protocol for the 2012 RPS RFO, PG&E announced its intent to procure about 1.25% of its retail sales volume, or about 1,000 GWh annually. This chapter summarizes the contents of the previously submitted Independent Evaluator report that described PG&E's selection of a short list for the 2012 RPS solicitation.

A. ROLE OF THE INDEPENDENT EVALUATOR

The CPUC required an independent evaluator to participate in competitive solicitations for utility power procurement in Decision 04-12-048. It required an IE when Participants in a competitive procurement solicitation include affiliates of investor-owned utilities (IOUs), IOU-built projects, or IOU-turnkey projects. Decision 06-05-039 expanded requirements, ordering use of and IE to evaluate and report on the entire solicitation, evaluation, and selection process for the 2006 RPS RFO and future competitive solicitations. This was intended to increase the fairness and transparency of the Offer selection process.

To comply with the requirements ordered by the CPUC, PG&E retained Arroyo Seco Consulting to serve as IE for the 2012 RPS solicitation. Arroyo undertook several tasks both prior to Offer Opening and subsequently. These included reviewing PG&E's solicitation protocols and discussing the methodology with the evaluation team, observing and analyzing PG&E's outreach efforts, participating in Offer opening, reading the Offers, performing independent evaluations of Offer value and project viability, monitoring PG&E's evaluation of Offers against its evaluation criteria, and discussing the shortlisting process and decisions with PG&E's team, management, and its Procurement Review Group.

The CPUC's Decision 06-06-066 detailed guidelines for treating confidential information in IOU power procurement including competitive solicitations. It provides for confidential treatment of "Score sheets, analyses, evaluations of proposed RPS projects", vs. public treatment of the total number of projects and MW bid by resource type. Where Arroyo's reporting on the fairness of PG&E's selection of Offers requires explicit discussion of such analyses, scores, and evaluations, these are redacted in the public version of this document.

B. ADEQUACY OF OUTREACH TO PARTICIPANTS AND ROBUSTNESS OF THE SOLICITATION

Concision and clarity of solicitation materials. PG&E's 2012 RPS solicitation protocol was modestly sized for a document of its type and is more concise than protocols PG&E used in prior years. Some of the bulky text specifying detailed requirements for Offers was shifted into Attachment J from the protocol's main body. Arroyo regards this as an improvement. Arroyo believes that the contents of PG&E's 2012 RPS RFO solicitation

protocol generally provided clear and comprehensible direction to Participants on how to prepare and submit complete Offer packages that could be accepted and evaluated.

By December 2012, PG&E had compiled a general contact list for use in publicizing its RFOs, totaling more than 1,900 individuals, an increase from the version of the list used in the 2011 RPS solicitation. About 60% of contacts represented entities that could develop renewable generation, sell from existing facilities, or sell RECs.

PG&E did not issue a press release to announce the issuance of the 2012 RPS RFO. News of the solicitation was picked up and reported in the electric power trade press, including Megawatt Daily. A turnout of 170 individual registrants and 167 actual attendees represented a strong response and expression of industry interest. Out of the firms represented at the 2012 bidders' conference, about three-quarters were companies directly involved with developing or owning and operating renewable energy generation.

Arroyo's conclusion is that PG&E conducted substantial outreach to renewable power developers active in North America. The number of individuals contacted, the distribution of the news of the solicitation in the electric power trade press, and the attendance at the bidders' conference all suggest that PG&E's overall outreach effort was strong and effective.

Robustness of the solicitation. Arroyo's opinion is that the response to the solicitation was robust; contracting with all Offers would provide almost half of all the energy required to serve PG&E's customers. The volume of bundled energy Offers proposed, [redacted] represented a decrease by about 60% from the 2011 RPS RFO's response. The total capacity offered for in-state, bundled generation was [redacted], which is about 30% of the response in PG&E's 2011 RPS RFO.

One would expect PG&E to be easily able to meet its volume goal for the solicitation from such a robust response. [redacted]

Arroyo speculates that the lower volume of Offers this year vs. last year stems partly from the requirement for new projects to have an active interconnection application that has obtained a Phase I interconnection study. In the 2011 RPS RFO, half of all Offers were for the output of proposed projects that had not yet applied for an interconnection or obtained a completed Phase I study. Such projects would have been ineligible to participate if the 2012 requirement had been in place. Also, some developers might have chosen not to offer projects that they would rather bring on line before PG&E's preferred 2019 and 2020 dates.

Imperial Valley Offers. The CPUC has stated a public interest in obtaining a robust response to the IOUs' RPS solicitations from developers in the Imperial Valley. In the 2009 RPS solicitations it required IOUs to hold special Imperial Valley bidders' conferences.

PG&E received [redacted] Offers for output of Imperial Valley facilities, [redacted] of all proposals for bundled energy delivery. [redacted]

[redacted]In the 2012 solicitation the total capacity of Offers for Imperial Valley projects, [redacted], totaled about [redacted] of all capacity offered. The total annual volume of Imperial Valley projects, [redacted]. This representation of Imperial Valley projects seems to be quite robust [redacted]

Adequacy of feedback from Participants. PG&E offered an opportunity for Participants whose Offers were rejected to discuss the outcome. Arroyo observed [redacted] of these sessions [redacted] Arroyo' opinion is that PG&E sought adequate feedback from Participants about the bidding and evaluation process.

C. FAIRNESS OF OFFER EVALUATION AND SELECTION METHODOLOGY

Arroyo's opinion is that PG&E's evaluation and selection methodology for identifying a short list for the 2012 RPS RFO was designed fairly, overall. Arroyo has some specific but narrow disagreements with the utility's approach.

Consistency with RPS Procurement Plan. PG&E's methodology was, overall, consistent with the approved 2012 RPS procurement plan. This includes numerous elements including the procurement goal, a focus on contracts that will contribute to RPS needs after 2019, equivalent treatment of existing and new projects' Offers, a preference for Offers contributing to Resource Adequacy needs, a discount to valuation for intermittent generation vs. firm energy, and use of a zero integration cost adder.

The plan also stated that PG&E would procure long-term volumes with initial delivery dates "no later than the latter part of the third compliance period." However, there was no specific element of PG&E's methodology that deterred selection of or discounted the value of Offers whose delivery starts after the end of the third compliance period. In the actual event, [redacted] and PG&E chose not to shortlist such Offers.

Market Valuation. PG&E's valuation methodology has several advantages over methods used by other utilities. It is rooted in a comparison to market forward prices rather than to model outputs for hypothetical future market price based on inputs such as forecast demand, modeled supply increases, and fuel price scenarios. It is relatively rapid to turn around several valuations, in contrast to the burdensome nature of running multiple cases of traditional utility production cost models. Net Market Value is a valuation concept that is generally accepted in the electric power industry. It provides an intuitive valuation based on the degree to which generating units are "in the money" with respect to market price.

There are some drawbacks with this approach, some of which are common to any valuation methodology for long-term PPAs. The methodology must rely on extrapolation of

market forward curves rather than on direct observation of traded prices for power two decades hence. Such extrapolated prices are unlikely to be accurate forecasts. A certain degree of interpolation or projection is required to achieve hourly granularity in price assumptions. The diurnal shape of California power market pricing is changing in response to the addition of new renewable resources, and it is difficult to forecast with accuracy how hourly price profiles might evolve over three decades.

In the absence of functioning, liquid, transparent markets in California for Resource Adequacy, the valuation relied on fundamental forecasts for the value of capacity rather than on traded forward curves. These forecasts peg the value of RA at rather high and monotonically increasing levels in future years, whereas the record so far in deregulated wholesale power markets is one of boom and bust cycles.

There are challenges in estimating what Net Qualifying Capacity the CAISO will assign to a project that does not yet exist, when changes to the currently approved methodology are anticipated but not fully confirmed. PG&E's approach to estimating NQC in the 2012 RPS RFO relied on its own assumptions about what the CAISO and CPUC will adopt.

PG&E's LCBF methodology took into account both proposed price and estimated net value of each Offer, in the narrow sense that price is a key input to the utility's valuation model. However, PG&E ranked Offers by Portfolio-Adjusted Value to make a primary screening for selection purposes, and does not construct or review a separate ranking by contract price. As a result, the methodology did not systematically select the lowest-priced Offers, particularly when those projects would incur large upgrade costs.

PG&E's LCBF methodology included the costs of transmission upgrades in its value calculations of all Offers involving projects that propose to interconnect directly to the CAISO. PG&E proposed used estimates of network upgrade costs from interconnection studies including CAISO Cluster 4 Phase II studies and Cluster 5 Phase I studies.

Arroyo believes that the LCBF methodology for the 2012 RPS RFO did not appropriately count congestion charges between peripheral CAISO delivery points, such as the Palo Verde hub, and hubs internal to CAISO service territories. Arroyo recommends that PG&E develop estimates of LMP multipliers appropriate for these delivery points as it has done for zones within the main body of the CAISO grid. Arroyo's concern is that the methodology overvalues Offers for delivery at Palo Verde because it does not take into consideration the difference between the value of power delivered at the periphery of the CAISO and the value of power delivered in the core of Edison's territory; [redacted]

Transmission costs. The valuation methodology assigned estimated transmission costs to the contract price of generation in order to compare Offers fairly, taking into account the full cost of generating power including both the price paid for the PPA and the cost of upgrades required to achieve reliable deliverability for new generation. This approach

provided a view of full costs of a project rather than only the energy procurement cost. This is a truer representation of the full cost to society of a new project.

The transmission cost methodology also had some drawbacks. The process of estimating transmission adders can be analytically burdensome. CAISO Phase I studies have been known to provide gross early overestimates of the actual network upgrade costs. In such a case, the methodology may disadvantage projects that have received a Phase I study but not yet a Phase II study, even though the analysis in hand is the best currently available estimate of project-specific upgrade requirements. This seems less than fully fair to some projects caught in that early stage of analysis, but is likely to be unavoidable when relying on project-specific information.

Arroyo expressed a concern in its IE report on PG&E's 2011 RPS RFO that PG&E applied transmission adders to projects that interconnect to the CAISO but did not include any estimate of network upgrade costs for projects that interconnect to the Imperial Irrigation District's grid. Arroyo believes that excluding network upgrade costs when valuing Offers located in California within IID's territory could unfairly bias selection towards IID-interconnecting projects. In those cases California ratepayers would end up bearing the upgrade costs in their rate base, but they happen to be businesses and households whose transmission rate base is outside the CAISO grid, so these costs were not taken into account when PG&E estimated the value of the contract offer.[3]

In its Decision approving PG&E's 2012 RPS procurement plan, the CPUC stated that "the Commission agrees with PG&E that no preferences should be given to CAISO-interconnected projects or to projects otherwise interconnected." By loading the valuation of CAISO-interconnected projects with network upgrade costs but not considering them when valuing IID-interconnected projects, the methodology created a potentially systematic preference for the latter. In Arroyo's opinion, PG&E's calculation of net value is not a neutral metric for comparing CAISO- and non-CAISO-interconnected projects. This resulted in a selection bias which is the opposite of the concern previously expressed by stakeholders including IID, fearing discrimination against IID-interconnected projects.

Not only did PG&E's method for calculating transmission adders omit network upgrades on the IID grid that are caused by new projects, it also omitted the cost of network upgrades that could or would be required in the CAISO grid for new generation built in IID's territory. Specifically, SDG&E estimated the impact of new "external" generation built to interconnect onto IID's grid upon SDG&E's network reliability. At some level of new build within IID's territory, SDG&E would have to construct new 69-kV transmission lines in its territory in order to accommodate flows from those projects into its Imperial

[3] Developers have objected that they paid, up front, the full cost of the required network upgrades. However, IID's practice is to provide the project with transmission service credits equivalent to that payment; the credits can be used to reduce the operating cost of transmitting the project's output to an IID-CAISO intertie point (though the project earns no interest for upfront financing the upgrades). To the extent that these credits reduce the project's expenses and reduce IID's transmission revenues, IID's customers make up the loss of revenues through rates. On that basis Arroyo's opinion is that IID ratepayers end up bearing some or all of the cost of network upgrades, and that these grid costs should be counted in evaluating whether a project should be built or not.

Valley substation and westward into its territory without overloads. Because projects that interconnect to IID's grid did not obtain an analysis of such reliability network upgrades to SDG&E's grid in their interconnection studies, PG&E was unable to obtain project-specific information about how to estimate CAISO upgrade costs driven by such effects.

Project viability. The implementation of the Project Viability Calculator as a screening tool in the evaluation of Offers brought several advantages. The Calculator is a step in the direction of more standardized evaluation of viability across all three IOUs. It provides a broader set of criteria by which projects are assessed than was the case with PG&E's prior approach to scoring viability. The range of scores from zero to 100 gives more visibility to differences between projects than prior methods that use single-digit scores.

There are still opportunities to improve the use of the Calculator. It is a somewhat crude screening tool with noise in the scoring process; differences of only two or three points between projects should not be regarded as determinative in selecting one and rejecting the other, because the difference falls within the error of the analysis. Some Participants chose to self-score their proposals in grossly inflated ways that overstate the Offer's viability beyond any reasonable measure. Arroyo believes this renders the self-scored Calculators submitted with offer packages too unreliable to use without review and correction.

PG&E's protocol stated that the utility "will evaluate the project viability of each offer" using the Project Viability Calculator, and that "PG&E will review all submissions and adjust self-scores as appropriate." Similarly, PG&E's presentation in its Participants' Webinar indicated that "All offers will be scored" using the Calculator.

D. FAIRNESS OF HOW PG&E ADMINISTERED THE OFFER EVALUATION AND SELECTION PROCESS

Arroyo's opinion is that PG&E's process for evaluating and selecting Offers for its 2012 RPS RFO short list was, overall, conducted in a fair and generally consistent manner. Arroyo disagreed with some of PG&E's choices.

FARINESS OF REJECTION OF OFFERS FOR NON-CONFORMANCE

After Offers were received, PG&E performed a detailed review of the packages in order to identify deficiencies that needed to be addressed and to assess which Offers deviated from the requirements of the solicitation protocol.

Some Participants submitted Offers for full-capacity PPAs, but the interconnection applications and studies showed that their projects had applied for energy-only interconnections. PG&E communicated the need for correct classification of interconnections and gave Participants an opportunity to reprice their Offers.

[redacted] were rejected by PG&E for nonconformance with the RFO's requirements; this is a relatively small number compared to rejections in PG&E's prior RPS solicitations. Most did not meet the requirement that new projects must have at least a CAISO Phase I interconnection study or its equivalent. [redacted] projects that proposed to interconnect to non-CAISO balancing authority areas outside California did not have means of delivering

their energy to a CAISO intertie point as Category 2 resources nor a proposal to arrange to be managed using a pseudo-tie or dynamic transfer agreement. In each case Arroyo agreed with PG&E's judgment that these proposals did not meet the RFO's requirements.

Short-term Offers. PG&E accepted [redacted] Offers that proposed delivery terms of five years, despite the statement in the public solicitation protocol that "PG&E is seeking offers with a term of at least 10 years. Short-term offers will not be considered." These [redacted] were Offers to extend existing contracts for delivery of power [redacted] PG&E's motivation for imposing the minimum 10-year delivery term was to ensure that the RPS-eligible energy would qualify as Category 1 deliveries and be "bankable" for purposes of counting towards PG&E's future compliance needs. However, if [redacted] proposals were to qualify as extensions of existing contracts rather than as new contracts, PG&E [redacted] believed that the energy sold during the contract extension would receive grandfathered treatment and be available to use to meet later RPS compliance needs. On that basis PG&E chose to accept [redacted] Offers.

[redacted]

Overall, Arroyo's opinion is that PG&E's decisions to reject Offers for failure to meet the stated requirements of the solicitation protocol were fair both to Participants submitting non-conforming proposals and those submitting conforming Offers.

REASONABLENESS OF PARAMETERS AND INPUTS

Nearly all parameters and inputs that PG&E used in its evaluation of the 2012 RPS RFO Offers were reasonably and fairly chosen, in Arroyo's opinion. Arroyo identified only one issue regarding the choices PG&E made about parameters and inputs that merits discussion.

PG&E chose inputs to its valuation of the buyer curtailment option using its business judgment about the size of the CAISO imbalance charges, ancillary services costs, and similar costs that would be avoided by exercising the option. The inputs are based on assumptions requiring subjective judgment. PG&E later assumed that the curtailment option would be more valuable for projects in NP-15 than elsewhere, which would imply that the adjustment to NMV for these benefits should be higher for NP-15 projects.

TRANSMISSION COST ADDERS AND INTEGRATION COSTS

PG&E closely followed its public and nonpublic protocols in administering its procedures for transmission adders. The team relied on data from interconnection studies or interconnection agreements to estimate the cost of network upgrades for new projects.

As stated in the discussion of PG&E's LCBF methodology, there is a narrow subset of cases in which Arroyo disagrees with how PG&E applies transmission cost adders. In Arroyo's opinion, transmission cost adders should be calculated and applied when valuing projects that interconnect within California outside the CAISO's balancing authority area, using the estimates of network upgrade costs provided in those other Transmission Owners' interconnection studies. PG&E ignored network upgrade costs that are borne by ratepayers of other balancing authority areas and that do not affect rates of PG&E customers.

PG&E's protocols did not specifically address how to calculate transmission adders for new projects with non-CAISO delivery points, and did not explicitly call for excluding these transmission costs. However, the non-public protocol for market valuation specified that transmission network upgrade costs would be subtracted in calculating Net Market Value. In future RFOs it would be better for the procurement plan and solicitation protocol to state explicitly that transmission adders will be set to zero for non-CAISO-interconnecting projects so that this element of the methodology is transparent to regulators and developers.

Arroyo would have applied transmission adders to projects that will interconnect to IID's grid, using IID facility studies as the basis for network upgrade cost adders. [redacted]

With the exception of projects outside the CAISO, Arroyo's opinion is that PG&E properly assessed and applied transmission adders to Offers. PG&E applied no integration cost adder, consistent with the Decision approving the 2012 RPS procurement plans.

USE OF ADDITIONAL CRITERIA IN CREATING A SHORT LIST

PG&E's overall approach to creating a short list was to rank PPA Offers for delivery of bundled energy by Portfolio-Adjusted Value and to select highest-valued Offers. Short list selection was also strongly influenced by PG&E applying its seller concentration criterion, and placing an extra emphasis on the buyer curtailment option value component of PAV.

Seller concentration. In an initial pass, the highest-ranked Offers were selected for the short list (regardless of technology) [redacted] The seller concentration criterion was applied to screen out Offers that would lead to shortlisting a total [redacted] from any individual developer or development consortium.

The implementation of the seller concentration criterion had some uneven effects. [redacted]

[redacted]

[redacted]

Resource diversity and buyer curtailment option as other criteria. After the initial selection of the highest-PAV Offers (as constrained by avoiding excess seller concentration), PG&E selected lower-valued Offers outside of strict economic ranking, in two categories.

[redacted]

[redacted]

[redacted]

By selecting these [redacted] out of strict value rank order based on other evaluation criteria, PG&E increased the size of its initial short list [redacted]

Project viability. Overall, PG&E followed the methodology stated in its RFO protocol:

"PG&E will evaluate the project viability of each offer using the June 2, 2011 CPUC adopted version of the PVC. Participants are requested to self-score each of their offers using the PVC…PG&E will review all submissions and adjust self-scores as appropriate."

The PG&E team used the Project Viability Calculator to score the projects considered for selection as well as some others; [redacted]. PG&E did not score every single Offer variant for project viability, and left the self-scores intact for lower-valued Offers that were rejected based on lower value.

RPS Goals and environmental risks. Appendix K to PG&E's 2012 solicitation protocol stated three specific subcomponents of the RPS Goals evaluation criterion. These included adherence to legislative direction, consistency with the CPUC's Water Action Plan, and support for Executive Order S-06-06 regarding biomass-fueled generation.

In the 2012 RFO, PG&E initially reviewed and scored [redacted] for consistency with RPS goals and for environmental risks based on information in offer packages, focusing on projects considered for shortlisting. These Offers were deemed to be consistent with RPS goals. Two shortlisted Offers were categorized by PG&E's environmental subteam as "lacking information" based on offer packages, sufficiently incomplete that it was difficult to assess environmental risks: [redacted] PG&E did not judge the risks associated with the incompleteness of the profile of these projects as sufficient to warrant their Offers' rejection.

Delivery point. PG&E stated in its 2012 solicitation protocol a preference for projects that deliver in PG&E's service territory. The calculation of Portfolio-Adjusted Value for each Offer included adjustments that reduce the value of projects located in SP-15 or outside the CAISO. PG&E justified its selection of [redacted] out of value ranking in part because of their siting in NP-15.

Commercial operation date. The protocol clearly stated PG&E's preference to select Offers that begin delivery term in 2019-2020. With [redacted] exceptions, shortlisted Offers proposed initial delivery in 2019 or 2020. The exceptions are projects currently contracted with PG&E that proposed to commence deliveries for new PPAS on the termination of the current PPAs, including [redacted]

Supplier diversity. An element of the RPS Goals evaluation criterion is whether an Offer will contribute towards PG&E's supplier diversity goals. Among developers submitting to the 2012 RPS RFO, none were CPUC-certified WMDVBEs. This compares unfavorably to prior years in which PG&E received Offers from diverse business enterprises.

ANALYSIS OF PG&E'S SHORT LIST SELECTION

Arroyo disagreed with one aspect of how PG&E applied its methodology and with a few of the choices made in the selection process.

- Imperial Irrigation District Transmission Adders. In Arroyo's opinion it would have been fairer to apply transmission adders for upgrade costs in IID's grid, even though those costs are not directly borne by PG&E ratepayers. In Arroyo's opinion, the

methodology advantages projects within IID's territory whose net valuations are uncompetitive when full costs, including required grid upgrades, are taken into account. This disparate treatment seems less than fully fair. [redacted] It seems undesirable from a public policy standpoint to select projects that are not the least-cost alternatives when all costs to society, including costs to IID customers residing in California, are considered.

- Offer Ranked Low for Project Viability. Arroyo ranked [redacted] in the bottom quartile among all Offers for project viability. Arroyo would not have selected such a project for the short list [redacted]

- [redacted] creates an appearance that PG&E has violated the principle of technology-neutral evaluation and selection that the regulator has suggested in its IE template.

- Screening for Seller Concentration. In Arroyo's opinion, it would have been preferable if PG&E had set the MW cutoff for any developer or consortium to [redacted]

[redacted] Arroyo views the choice of [redacted] as within the latitude for PG&E to exercise its business judgment.

- Maximum Buyer Curtailment. PG&E chose to select [redacted] in NP-15 that offered the maximum hours of buyer curtailment. Arroyo is uncertain whether PG&E's belief that NP-15 project curtailments offer the most benefit to its ratepayers is accurate, or whether ZP-26 projects might provide comparable benefits.

Although Arroyo disagreed with these particular choices that PG&E made, the basis for most of these disagreements centers on differences in business judgments about relative priorities, not on choices made contrary to the solicitation protocol. Arroyo believes that PG&E's selections, based on its subjective business judgment, are reasonable.

Overall fairness of administration. Despite a handful of disagreements, Arroyo Seco Consulting's overall judgment is that PG&E's decisions to select or reject Offers to arrive at a short list for the 2012 RPS RFO were reasonable and justifiable, overall. Most disagreements between Arroyo and PG&E were about choices Arroyo would have not made if it were administering the RFO, but that Arroyo agrees are choices a reasonable person could make if she had different priorities or emphases regarding weights assigned to evaluation criteria. Arroyo believes that PG&E's choices are within the realm of "reasonable business judgment" that the CPUC allows IOUs to exercise in energy procurement.

While Arroyo believes that PG&E may be justified in omitting transmission adders for IID-interconnecting projects because those costs do not directly affect PG&E ratepayers, in Arroyo's opinion the practice is not particularly fair. Nothing in the solicitation protocols suggests that upgrade cost will not be applied for such projects; this choice lacks transparency. Arroyo's opinion is that PG&E's administration of its methodology was overall reasonable but that treatment of IID-interconnecting projects was less than fully fair.

Imperial Valley. PG&E received [redacted] for projects operating in or proposed to be sited in the Imperial Valley, 14% of the total number of conforming Category 1 Offers. Projects sited in the Imperial Valley comprise [redacted] Overall, developers' response to propose Imperial Valley projects was robust and PG&E's selection of Imperial Valley Offers was representative of that strong response.

2. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

This chapter provides an independent review of the extent to which PG&E's negotiations with Recurrent Energy for a power purchase agreement for RE Astoria, LLC were conducted fairly with respect to competitors and to ratepayers.

PG&E notified Recurrent that its Offer for RE Astoria had been shortlisted in mid-April 2013. The parties began negotiations in early June 2013. Arroyo telephonically observed five negotiation sessions between PG&E and the Recurrent team (many of the discussions took place through e-mail exchanges; the utility provided copies of e-mails to Arroyo). Arroyo was also able to review multiple draft versions of the contract in order to identify specific proposals and counterproposals the parties made in the course of discussions. The original starting point for the negotiations was PG&E's 2012 RPS Form Agreement published with the 2012 RPS solicitation protocol in December 2012. PG&E revised and updated some subsections of its Form Agreement (changes that applied to draft PPAs with all shortlisted parties) during the course of negotiations.[4]

Arroyo's opinion is that PG&E's negotiations with the Recurrent commercial team for the RE Astoria contract were conducted in a manner that was fair to ratepayers and competitors.

A. BACKGROUND INFORMATION

Recurrent Energy is a North American developer of solar photovoltaic generation projects that is leveraging its prior experience with rooftop installations into utility-scale projects. (While Recurrent previously developed rooftop solar installation on warehouses in Spain, it does not currently have a European office; it has a development office in Australia.) [redacted]

PG&E previously executed a PPA with RE Kansas, LLC, a 20-MW solar photovoltaic project to be constructed by Recurrent Energy in the Central Valley near Lemoore; the RE Kansas contract originated from Recurrent's Offer to PG&E's 2011 RPS RFO. Additionally, PG&E has executed contracts with other project subsidiaries of Recurrent Energy: RE Old River One, LLC, a 20-MW solar PV project near Bakersfield with a 2015

[4] For example, the revised Form Agreement prevents PG&E from paying sellers for "surplus delivered energy", deliveries that exceed contract capacity in any settlement interval. It requires the seller to install equipment needed to implement buyer curtailments. The annual threshold for "excess energy", beyond which payments to the seller is reduced, was tightened to a trigger level at 115% of contract quantity from the previous trigger level of 120%. These changes and others had the general effect of enhancing ratepayer protections in the contracts resulting from the 2012 RPS RFO. Most of the changes were included in PG&E's Form Agreement for its 2013 RPS solicitation.

on-line date that was awarded in the utility's third Renewable Auction Mechanism RFO, and RE Kansas South, a 20-MW solar PV project in Kings County, awarded in PG&E's 2011 Photovoltaic Program PPA solicitation (Recurrent subsequently sold that project to NRG Energy; it began commercial operation in mid-2013). Also, PG&E is contracted with RE Kent South, a 20-MW project also in Kings County, awarded in the 2012 PV Program RFO.

The RE Astoria project will be a [redacted] solar photovoltaic facility to be constructed in the Mojave Desert near its western edge, on a site west of Rosamond that abuts the Kern County-Los Angeles County boundary on the project's south.[5] [redacted]

The negotiations between PG&E and Recurrent for the RE Astoria contract continued from June through November 2013 and resulted in an agreement that was executed on December 16, 2013.

B. PRINCIPLES FOR EVALUATING THE FAIRNESS OF NEGOTIATIONS

Arroyo took into account several principles to evaluate the degree of fairness with which PG&E handled negotiations with Recurrent.

- Were sellers treated fairly and consistently by PG&E during negotiations? Were all sellers given equitable opportunities to advance their Offers towards final PPAs? Were individual sellers given unique opportunities to move their proposals forward or concessions to improve their contracts' commercial value, opportunities not provided to others?

- Was the distribution of risk between seller and buyer in the PPAs distributed equitably across PPAs? Did PG&E's ratepayers take on a materially disproportionate share of risks in some contracts and not others? Were individual sellers given opportunities to shift their commercial risks towards ratepayers, opportunities that were not provided to others?

- Was non-public information provided by PG&E shared fairly with all sellers? Were individual sellers uniquely given information that advantaged them in securing contracts or realizing commercial value from those contracts?

- If any individual seller was given preferential treatment by PG&E in the course of negotiations, is there evidence that other sellers were disadvantaged by that treatment? Were other proposals of comparable value to ratepayers assigned materially worse outcomes?

[5] Astoria Avenue is an east-west street in Rosamond that, as a dirt road in its western extremities, serves as the northern border of the proposed project site.

Some of the issues addressed in the negotiation included:

- Initial energy delivery date. [redacted]

  The parties agreed to a January 2019 date for initial energy deliveries. [redacted]

- Contract price and delivery term. [redacted]

[redacted]

- Initial operation as energy-only project. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

- Curtailment limit and pricing. When PG&E updated and revised its 2012 Form Agreement in May 2013, it removed the limit on the number of hours per contract year that the utility may invoke buyer curtailment. In other words, PG&E can choose to require a seller to shut off production for the entire contract year. [redacted]

- Cure period for events of default. [redacted]

- Termination for excess network upgrade cost. [redacted]

[redacted]

- Guaranteed energy production [redacted]

[redacted]

- Telemetry parameters [redacted]

- Commercial operation date [redacted]

- Specifications and drawings [redacted]

[redacted]

D. DEGREE OF FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

Overall, Recurrent Energy requested few changes from the revised version of PG&E's 2012 RPS Form Agreement provided to the seller in May 2013. Of the requested changes, PG&E granted few concessions. Arroyo believes that those changes from the Form Agreement were reasonable, and likely will have minimal adverse impact on ratepayers.

While RE Astoria has obtained [redacted]

[redacted]

As noted in the chapter on the evaluation process, PG&E selected RE Astoria for its short list at the same time it rejected a competing Offer which had a higher valuation. The competing proposal, [redacted] was also for an attractively priced southern California solar photovoltaic facility. This action seems to be inconsistent with the fairness principle that an IOU's selection methodology should provide consistent evaluation of Offers of different size; PG&E's 2012 RPS solicitation protocol did not express a preference regarding the size of projects. PG&E might have rejected the smaller project based on its stated criterion of avoiding excess

counterparty concentration; however, as previously noted, the utility appears to have applied that criterion to limit the total number of shortlisted Offers per seller in an inconsistent way.

However, Arroyo now considers fairness concerns about how [redacted] was treated compared to RE Astoria to be negligible or moot because [redacted]

Arroyo did not observe PG&E providing RE Astoria with non-public information that advantaged it against competing sellers. With the minor exception of the terms regarding [redacted] RE Astoria's treatment by PG&E during negotiations was, overall, comparable with the treatment of its competitors in the 2012 RPS RFO.

Arroyo's opinion is that PG&E's negotiations with RE Astoria were conducted fairly with respect to ratepayers and competitors.

3. MERIT FOR CPUC APPROVAL

This chapter provides an independent review of the merits of the contract between PG&E and RE Astoria, LLC against criteria identified in the Energy Division's 2012 RPS IE template.

A. CONTRACT SUMMARY

On December 16, 2013, PG&E and RE Astoria, LLC executed a power purchase agreement for delivery of RPS-eligible energy from the proposed new solar photovoltaic facility.

Contract capacity for RE Astoria is 100 MW. The contract quantity for the PPA declines over time on a fixed schedule based on expected degradation of the solar panels, averaging 297 GWh/year over the delivery term. The contract's guaranteed commercial operation date is January 3, 2019, [redacted] The project will be located in the Mojave Desert about twenty miles west of Rosamond, just north of the Kern County-Los Angeles County line, on alluvial fans below the Tehachapi Mountains.

B. NARRATIVE OF EVALUATION CRITERIA AND RANKING

The 2012 RPS template for IEs provided by the Energy Division calls for a narrative of the merits of the proposed project on the criteria of contract price, portfolio fit, and project viability.

CONTRACT PRICE AND MARKET VALUATION

Arroyo has compared the net value of the RE Astoria contract to relevant peer groups of previously and recently offered competing sources of RPS-eligible energy, using the results of both PG&E's analysis and a simpler but independent model. Based on those comparisons, Arroyo opines that the valuation of the contract ranks high compared to relevant peer groups of competing proposals, and the contract price ranks low.

Contract Price. RE Astoria deliveries to PG&E will be priced [redacted]

RE Astoria's contract fell into the lowest-priced quartile of all Category 1 Offer variants received in PG&E's 2012 RPS RFO when ranked on levelized pre-TOD price; this is also the case with levelized TOD-adjusted prices. It was the [redacted] Offer remaining on PG&E's short list (in pre-TOD dollars) in November 2013. On that basis, Arroyo's opinion is that the RE Astoria contract's pricing ranks as low.

Market Valuation. In presenting the RE Astoria PPA to its Procurement Review Group in November 2013, the utility estimated the "portfolio-adjusted value" (PAV) of the contract [redacted][6] This analysis ranked the RE Astoria contract as the [redacted] among shortlisted proposals from the 2012 RPS RFO, [redacted]

When PG&E selected a short list in March 2013, it estimated PAV for all Offer variants. At that time the RE Astoria Offer for a 100-MW project [redacted] among conforming Category 1 Offer variants submitted the 2012 RPS RFO. The parties subsequently altered the contract price during negotiations as described in the previous chapter.

Arroyo performed a valuation of all Offers to the 2012 RPS solicitation using a much simpler but independent methodology with independently determined input parameters. Using that approach to estimating net market value, Arroyo ranks the executed version of the RE Astoria contract in the highest-valued decile among Offers received.

Based on these comparisons, Arroyo's opinion is that the RE Astoria contract ranks high in market valuation.

PORTFOLIO FIT

Deliveries from the RE Astoria PPA are expected to begin in January 2019. The utility's 2012 RPS procurement plan expressed an expectation that it would have procured sufficient RPS-eligible energy to meet its RPS compliance needs through the third compliance period, and a strong preference for Offers with deliveries beginning in 2019 or later.[7]

In its 2012 RPS RFO, PG&E eliminated its prior use of a stand-alone metric for portfolio fit and developed an adjustment used in calculating Portfolio-Adjusted Value that measures RPS Portfolio Need[redacted]

[6] PG&E altered the input parameters to its PAV methodology when ranking proposed contracts for selection for execution in November 2013. [redacted], compared to the overall set of input parameters it previously used to select a short list in March 2013. While PG&E routinely updates input parameters such as market forward curve data when analyzing PAV, [redacted]. At the margin Arroyo believes that the alteration changed which PPAs were selected for execution. [redacted] However, despite this additional burden applied to RE Astoria's economics in the adjusted valuation, the Offer was selected for execution.

[7] In its 2013 draft RPS procurement plan PG&E expressed a forecasted need for incremental RPS-eligible deliveries beginning in 2020, presumably taking into account procurement from the 2012 RFO.

[redacted] The adjustment to PAV is based on the levelized value of annual adjustments. It is in a sense an upwards adjustment to valuation for the degree to which RPS deliveries from a proposed contract provide a good fit with time periods in which the utility's portfolio is expected to have a net compliance need.

PG&E reports that the RPS Portfolio Need adjustment in the case of the RE Astoria PPA is [redacted]

In contrast, the average RPS Portfolio Need adjustment for Offers received in the 2012 RPS RFO was [redacted]. The RPS Portfolio Need adjustment for RE Astoria ranks moderate to high in comparison to competing Offers. Arroyo does not consider the deliveries by the project in calendar 2019 to pose a problem even if it turns out that PG&E has procured an excess of RPS-eligible deliveries that year. In that case, the RE Astoria deliveries will simply contribute somewhat to a build-up of PG&E's bank of renewable energy credits that can be used for RPS compliance later in the 2020s.

PROJECT VIABILITY

Arroyo has scored the RE Astoria project using the Energy Division's Project Viability Calculator, which lists several attributes of projects on which viability may be measured.

Project development experience. Recurrent Energy has experience developing solar photovoltaic projects of smaller capacity than the proposed 100-MW RE Astoria facility. Its first utility-scale project was installed in 2010 on the city of San Francisco's Sunset Reservoir, selling its output to San Francisco Public Utilities Commission in a 25-year, 4.5-MW PPA reported in the press to be priced at $236.5/MWh. Recurrent subsequently sold this project to a subsidiary of Duke Energy Corporation.

Under its feed-in tariff program, Sacramento Municipal Utility District (SMUD) awarded contracts for four of Recurrent Energy's projects, reported by SMUD to total 69.4 MW and by Recurrent to total 88 MW_p.[8] The contracts are reported by the California Energy

[8] [redacted]

Commission to have an average price of $111/MWh[9]. These projects began operation in 2012:

- RE Bruceville, a 15-MW facility constructed in three phases of 5 MW each, about 2 miles south of Elk Grove;
- RE Kammerer, a 15-MW facility also constructed in three phases of 5 MW each, half a mile south of Elk Grove;
- RE Dillard Road, a 9.4-MW facility about 1 miles south of Sloughhouse;
- RE McKenzie, a 30-MW facility constructed in six phases of 5 MW each, about 4 miles north of Galt.

Ownership shares of all these Sacramento county projects were sold in 2011 to Google Inc. and to a subsidiary of Kohlberg Kravis Roberts & Co., with Recurrent Energy retaining a minority equity share.

Recurrent has also brought six solar photovoltaic projects totaling about 51 MW of capacity into operation in 2013 in Ontario, three near Smiths Falls southwest of Ottawa, three near Waubaushene north of Toronto. Four of these facilities have 10-MW capacities. All are contracted with the Ontario Power Authority. Recurrent is expected to bring several additional OPA-contracted projects into operation in 2014, all 10 MW or less in capacity. Recurrent has entered into an agreement to sell majority ownership of a portfolio that includes the operating plants to Mitsubishi Corporation and Osaka Gas Company, with Recurrent retaining about 10% ownership.

PG&E awarded a contract from its 2011 Photovoltaic Program solicitation to Recurrent Energy's 20-MW RE Kansas South facility in Kings County. Recurrent developed the project then sold it to a subsidiary of NRG Energy, Inc., and the facility entered commercial operation in July 2013.[10] NRG Energy operates and maintains this project.

Recurrent has contracted with SCE for its proposed 20-MW RE Victor Phelan 1 project near Adelanto and 5-MW RE Rio Grande project near Mojave, with expected on-line dates at the end of 2013. Its proposed 45-MW RE Columbia solar project is contracted with the California Department of Water Resources and is expected to come on-line at a site near Mojave by mid-2015. The nearby 10-MW RE Columbia 3 solar project is contracted with SCE for an end-2013 on-line date. Recurrent has contracted with the City of Santa Clara for its 20-MW RE Rosamond 1 solar project and with SCE for its 20-MW Rosamond 2 solar project, both expected to come on line at the end of 2013. With the exception of RE

[9] California Energy Commission, "Distributed Energy in California: 14 Case Studies", presented at the CEC IEPR Workshop by Ashley Fabrizio, June 6, 2012, page

[10] Recurrent also sold a 20-MW solar photovoltaic project, known as TA-High Desert or RE Mayfair, to a subsidiary of NRG Energy. This project was initially developed by Tuusso Energy LLC of Seattle, was contracted to Southern California Edison, purchased by Recurrent in 2012, and started commercial operations in March 2013.

Columbia, Recurrent has contracted to sell full ownership of these various southern California projects to a subsidiary of Kohlberg Kravis Roberts and Google.[11]

Recurrent developed the 4.5-MW Ajo and 16.6-MW Bagdad solar PV projects in Arizona and sold them to a subsidiary of Duke Energy Corporation; they commenced operation under contract to Arizona Public Service Company in 2011.

Thus, Recurrent Energy does not yet have experience developing, constructing, and bringing into operation a single photovoltaic facility as large as 100 MW of capacity. The developer has a track record of success in developing projects or separate phases of 5-, 10- and 15-MW capacity and bringing them to the point of commercial operation, skills which arguably could be scalable to larger projects.

Ownership/O&M experience. Based on its history, Recurrent Energy's business model appears to involve selling whole or majority ownership of solar projects it develops to other owners, before or upon start of commercial operations. Arroyo speculates that Recurrent could similarly sell all of or a majority interest in RE Astoria to another owner or owners. [redacted] The utility-scale project which Recurrent had the longest ownership experience with was the 4.5-MW Sunset Reservoir solar photovoltaic project, brought into operation in late 2010 and sold in mid-2013. Press reports about the expected sale of five Southern California projects to KKR and Google indicate that Recurrent will continue to manage the facilities without an ownership share.

Technical feasibility. [redacted] These technologies are well-commercialized and deployed in numerous projects around the world. [redacted]

Resource quality. [redacted] This is superior to insolation in nearly all parts of PG&E's service territory.

[11] SNL Energy Electric Utility Report, "Google, KKR to invest in portfolio of Recurrent Energy solar PV projects", November 25, 2013.

Manufacturing supply chain. Although Recurrent Energy is a subsidiary of Sharp Corporation, it has not in the past used Sharp's photovoltaic modules for projects. [redacted] vendors that Recurrent Energy has used in the past to supply modules for other projects such as Yingli Green Energy[12] and Suntech Power appear not to have any supply chain constraints that would prevent them from meeting the needs for a 100-MW project that might come on-line mid-decade.

Site control. [redacted]. Recurrent has secured site control for sufficient land [redacted] to accommodate a 100-MW project for the PPA with PG&E. [redacted]

Permitting. RE Astoria has applied to Kern County for a conditional use permit; the county deemed the application complete on January 25, 2013. Arroyo believes that technical studies required for the permitting process have begun or been completed; a Fresno-based consultant, LSA Associates, cites its work on traffic and noise impacts of the RE Astoria project on its public website. Recurrent has previously obtained conditional use permits for several PV projects sited in Kern County, including facilities around Rosamond. It has recently experienced some adverse community reaction to projects in the Mojave Desert related to construction.[13]

Project financing status. [redacted]

The Sunset Reservoir project was financed by a private placement of $18 million of 24-year term debt from Prudential Capital. In a sense, Recurrent Energy financed the photovoltaic projects contracted to SMUD by selling most of its equity ownership to KKR and Google. In December 2011, Mizuho Corporate Bank provided a four-year, $250 million construction loan to Recurrent Energy to build the approximately 155 MW[14] of new solar generation (comprising several individual projects) in Ontario for Recurrent Energy's feed-in tariff contracts with Ontario Power Authority. In other words, Recurrent has successful

[12]Recurrent Energy and Yingli Green Energy had previously agreed to a strategic sales agreement under which Yingli would sell Recurrent crystalline PV modules from mid-2009 through 2012. Yingli Green Energy press release, "Yingli Green Energy and Recurrent Energy sign strategic sales agreement", June 9, 2009.

[13] Mojave Desert News, "More Dust Complaints Surface from Solar Construction", July 5, 2013.

[14] Recurrent Energy characterizes the total Ontario portfolio as 200 MW in its press releases, presumably reflecting direct-current peak capacity. Recurrent Energy press release, "Recurrent Energy Secures $250M Financing from Mizuho for 200 MW of Solar PV Projects in North America", December 19, 2011.

experience obtaining construction financing for a portfolio of several smaller solar projects that in aggregate is larger in capacity than the 100-MW RE Astoria facility.

Press reports in late 2013 suggest that Recurrent Energy is seeking more than $350 million of debt financing for some of its California project portfolio, through issuance of a request for proposals.[15] The track record of the developer suggests that to a large extent Recurrent relies on obtaining construction loans then selling its project companies, rather than obtaining PPA-based project term debt.

Interconnection progress. [redacted]

Transmission requirements. [redacted]

Reasonableness of COD. [redacted] The developer has considerable experience constructing and bringing into operation smaller solar photovoltaic projects than RE Astoria. Depending on what module vendor Recurrent selects, the technology should be well-commercialized and there should not likely be impediments to schedule posed by manufacturing constraints. Given these considerations, in Arroyo's opinion it is reasonable to expect RE Astoria to come on-line at the guaranteed commercial operation date of January 2019.

Arroyo has scored the RE Astoria project and the other submittals to PG&E's 2012 RPS RFO using the Energy Division's Project Viability Calculator. The independently estimated score is [redacted]; on that basis Arroyo ranks the project in the third highest quartile among Offers to the solicitation.

RPS GOALS

[15] Power, Finance, and Risk, "Recurrent Looks for Portfolio Financing", Nov. 4, 2013.

In PG&E's 2012 RPS RFO, the utility applied an evaluation criterion for consistency with and contribution to California's goals for the RPS program. Offers were evaluated on three dimensions:

- California-based projects providing benefits to communities afflicted with poverty, high unemployment, or high emission levels;
- Impact of the project on California's water quality and use;
- Contribution to the biomass goal of Executive Order S-06-06.

RE Astoria is located near the unincorporated town of Rosamond. Based on estimates by the U.S. Census Bureau's 2008-2012 American Community Survey, the Rosamond census-designated place has median household income somewhat below that of the state of California as a whole ($59 vs. $61 thousand per year), and its percentage of individuals living in poverty is considerably above that of the state (21.2% vs. 15.3 %). Rosamond has an unemployment rate that is somewhat above that of the state as a whole (13.1% vs. 11.0%). Eastern Kern County is a non-attainment area for the 8-hour ozone standard and the PM-10 particulate standard. As a solar photovoltaic facility, RE Astoria will likely have minimal impact on water quality and use. It does not contribute to the state's biomass goal. On that basis Arroyo would expect that the project would score as moderate on the RPS Goals criterion as defined by PG&E for its 2012 solicitation.[16]

C. DISCUSSION OF MERIT FOR APPROVAL

In Arroyo's opinion, the RE Astoria contract merits CPUC approval:

- The contract price (both before and after adjustment for time-of-delivery factors) ranks low when compared to all Offers received in PG&E's 2012 RPS solicitation or to the proposals that PG&E selected for its short list.
- PG&E's estimate of Portfolio-Adjusted Value ranks the contract as high compared to all 2012 Offers. Arroyo's independent analysis ranks the contract as quite high in net value when compared to all 2012 Offers.
- In Arroyo's opinion, the proposed RE Astoria facility ranks as moderate in project viability. Its developer does not yet have experience developing, constructing, or operating and maintaining a single solar photovoltaic facility as large as 100 MW, and the project has not yet obtained its conditional use permit from Kern County. However, the developer has considerable experience bringing smaller solar PV projects into operation, the facility has made progress towards an interconnection agreement and does not face serious impediments to required network upgrades, and

16 [redacted]

Arroyo believes that RE Astoria should be able to meet its guaranteed commercial operation date.

- The PPA ranks moderate to high in portfolio fit when compared to all 2012 Offers when using PG&E's metric for adjusting PAV for timing of contribution to RPS compliance needs.

- Arroyo believes that the project-specific negotiations between the parties were handled in a manner fair to both competitors and ratepayers.

Overall, Arroyo's opinion is that the RE Astoria contract merits CPUC approval based on superior pricing and value coupled with moderate viability and portfolio fit.

DECLARATION OF GILLIAN CLEGG
SEEKING CONFIDENTIAL TREATMENT
FOR CERTAIN DATA AND INFORMATION CONTAINED IN
ADVICE LETTER 4355-E
(PACIFIC GAS AND ELECTRIC COMPANY - U 39 E)

I, Gillian Clegg, declare:

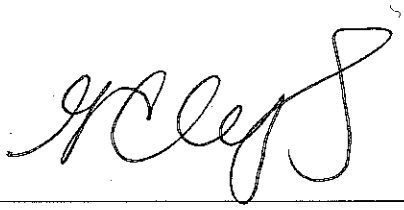
1. I am presently employed by Pacific Gas and Electric Company ("PG&E"), and have been an employee at PG&E since 2007. My current title is Principal within PG&E's Energy Procurement organization. In this position, my responsibilities include negotiating PG&E's Renewables Portfolio Standard Program ("RPS") Power Purchase Agreements. In carrying out these responsibilities, I have acquired knowledge of PG&E's contracts with numerous counterparties and have also gained knowledge of the operations of electricity sellers in general. Through this experience, I have become familiar with the type of information that would affect the negotiating positions of electricity sellers with respect to price and other terms, as well as with the type of information that such sellers consider confidential and proprietary.

2. Based on my knowledge and experience, and in accordance with Decision ("D") 08-04-023 and the August 22, 2006 "Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with Decision 06-06-066," I make this declaration seeking confidential treatment of Appendices A, B, C1, D, E, F, and G to PG&E's Advice Letter 4355-E, submitted on February 7, 2014.

3. Attached to this declaration is a matrix identifying the data and information for which PG&E is seeking confidential treatment. The matrix specifies that the material PG&E is seeking to protect constitutes the particular type of data and information listed in Appendix 1 of D.06-06-066 and Appendix C of D.08-04-023 (the "IOU Matrix"), or constitutes information that should be protected under General Order 66-C. The matrix also specifies the category or

categories in the IOU Matrix to which the data and information corresponds, if applicable, and why confidential protection is justified. Finally, the matrix specifies that: (1) PG&E is complying with the limitations specified in the IOU Matrix for that type of data or information, if applicable; (2) the information is not already public; and (3) the data cannot be aggregated, redacted, summarized or otherwise protected in a way that allows partial disclosure. By this reference, I am incorporating into this declaration all of the explanatory text in the attached matrix.

I declare under penalty of perjury, under the laws of the State of California, that to the best of my knowledge, the foregoing is true and correct. Executed on February 7, 2014, at San Francisco, California.



GILLIAN CLEGG

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
Advice Letter 4355E
February 7, 2014

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Document: Advice Letter 4355-E							
Appendix A	Y	Item V C) LSE Total Energy Forecast – Bundled Customer (MWh) Item VI B) Utility Bundled Net Open (Long or Short) Position for Energy (MWh) Item VII G) Renewable Resource Contracts under RPS program – Contracts without SEPs. Item VII (un-numbered category following VII G)) Score sheets, analyses, evaluations of proposed RPS projects. Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids. General Order 66-C.	Y	Y	Y	This Appendix contains information on PG&E's sales forecast and PG&E's renewable net open position. This information would provide market sensitive information to competitors and is therefore considered confidential. This Appendix contains bid information and evaluations from the 2012 Solicitation; discuss, analyze and evaluate the Project and the terms of the Power Purchase Agreement ("PPA"); contain information, analyses and evaluations of project viability; and contain confidential information of the counterparty (including financial information). Disclosure of this information would provide valuable market sensitive information to competitors. Release of this information would be damaging to negotiations. In addition, if information about and evaluations of the project's viability is made public, it could harm the counterparties and adversely affect project viability. Finally, certain information has been obtained in confidence from the counterparty under an expectation of confidentiality. It is in the public interest to treat such information as confidential because if such information were made public, it would put the counterparty at a business disadvantage, could create a disincentive to do business with PG&E and other regulated utilities, and could have a damaging effect on current and future negotiations with other counterparties.	For information covered under Item V C) and VI B) the front three years of the forecast remain confidential for three years. For information covered under Item VII G) remain confidential for three years after the commercial operation date, or one year after expiration (whichever is sooner). For information covered under Item VII (un-numbered category following VII G), remain confidential for three years. For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval. For information covered under Item VIII B), remain confidential for three years after winning bidders selected. For information covered under General Order 66-C, remain confidential.

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
Advice Letter 4355E
February 7, 2014

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Appendix B	Y	Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids.	Y	Y	Y	This Appendix contains bid information and bid evaluations from the 2012 Solicitation. This information would provide market sensitive information to competitors and is therefore considered confidential. Furthermore, offers received outside of the solicitations are still under negotiation, further substantiating why releasing this information would be damaging to the negotiation process.	For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval For information covered under Item VIII B), remain confidential for three years after winning bidders selected.

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
Advice Letter 4355E
February 7, 2014

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Appendix C1	Y	Item VII G) Renewable Resource Contracts under RPS program - Contracts without SEPs. Item VII (un-numbered category following VII G) Score sheets, analyses, evaluations of proposed RPS projects. Item VIII A) Bid information and B) Specific quantitative analysis involved in scoring and evaluation of participating bids. General Order 66-C.	Y	Y	Y	This Appendix contains bid information and evaluations from the 2012 Solicitation; discusses, analyzes and evaluates the Project and the terms of the PPA; contains information, analyses, and evaluations of project viability; and it contains confidential information of the counterparty. Disclosure of this information would provide valuable market sensitive information to competitors. Release of this information would be damaging to negotiations with other counterparties and should remain confidential. In addition, if information about and evaluations of project viability is made public, it could harm the counterparty and adversely affect project viability. Finally, certain information has been obtained in confidence from the counterparty under an expectation of confidentiality. It is in the public interest to treat such information as confidential because if such information were made public, it would put the counterparty at a business disadvantage, could create a disincentive to do business with PG&E and other regulated utilities, and could have a damaging effect on current and future negotiations with other counterparty.	For information covered under Item VII G) remain confidential for three years after the commercial operation date, or one year after expiration (whichever is sooner). For information covered under Item VII (un-numbered category following VII G), remain confidential for three years. For information covered under Item VIII A), remain confidential until after final contracts submitted to CPUC for approval. For information covered under Item VIII B), remain confidential for three years after winning bidders selected. For information covered under General Order 66-C, remain confidential.

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
Advice Letter 4355E
February 7, 2014

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Appendix D	Y	Item VII G) Renewable Resource Contracts under RPS program - Contracts without SEPs. Item VII (un-numbered category following VII G) Score sheets, analyses, evaluations of proposed RPS projects. General Order 66-C.	Y	Y	Y	This Appendix contains bid information and discusses the terms of the PPA. Disclosure of this information would provide valuable market sensitive information to competitors. Release of this information would be damaging to negotiations with other counterparties and should remain confidential. Furthermore, the counterparty to the PPA has an expectation that the terms of the PPA will remain confidential. It is in the public interest to treat such information as confidential because if such information were made public, it would put the counterparty at a business disadvantage, could create a disincentive to do business with PG&E and other regulated utilities, and could have a damaging effect on current and future negotiations with other counterparty.	For information covered under Item VII G) remain confidential for three years after the commercial operation date, or one year after expiration (whichever is sooner). For information covered under Item VII (un-numbered category following VII G), remain confidential for three years. For information covered under General Order 66-C, remain confidential.
Appendix E	Y	Item VII G) Renewable Resource Contracts under RPS program - Contracts without SEPs.	Y	Y	Y	This Appendix contains the PPA for which PG&E seeks approval in the Advice Letter filing. Disclosure of certain terms of the PPA would provide valuable market sensitive information to competitors. Release of this information would be damaging to negotiations with other counterparties and should remain confidential. Furthermore, the counterparty to the PPA has an expectation that the terms of the PPA will remain confidential.	For information covered under Item VII G), remain confidential for three years after the commercial operation date, or one year after expiration (whichever is sooner)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E)
Advice Letter 4355E
February 7, 2014

IDENTIFICATION OF CONFIDENTIAL INFORMATION

Redaction Reference	1) The material submitted constitutes a particular type of data listed in the Matrix, appended as Appendix 1 to D.06-06-066 (Y/N)	2) Which category or categories in the Matrix the data correspond to:	3) That it is complying with the limitations on confidentiality specified in the Matrix for that type of data (Y/N)	4) That the information is not already public (Y/N)	5) The data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure (Y/N)	PG&E's Justification for Confidential Treatment	Length of Time
Appendix F	Y	Item VII G) Renewable Resource Contracts under RPS program - Contracts without SEPs.	Y	Y	Y	This Appendix contains the PPA for which PG&E seeks approval in the Advice Letter filing. Disclosure of certain terms of the PPA would provide valuable market sensitive information to competitors. Release of this information would be damaging to negotiations with other counterparties and should remain confidential. Furthermore, the counterparty to the PPA has an expectation that the terms of the PPA will remain confidential.	For information covered under Item VII G), remain confidential for three years after the commercial operation date, or one year after expiration (whichever is sooner).
Appendix G	Y	Item VII (un-numbered category following VII G) Score sheets, analyses, evaluations of proposed RPS projects. Item VI B) Utility Bundled Net Open Position for Energy (MWh).	Y	Y	Y	This Appendix contains information that, if disclosed, would provide valuable market sensitive information to competitors and allow them to see PG&E's remaining RPS net open energy position. This information should remain confidential for three years.	Remain confidential for three years.

PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

1st Light Energy
AT&T
Alcantar & Kahl LLP
Anderson & Poole
BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Braun Blaising McLaughlin, P.C.
CENERGY POWER
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties
Calpine
Casner, Steve
Center for Biological Diversity
City of Palo Alto
City of San Jose
Clean Power
Coast Economic Consulting
Commercial Energy
County of Tehama - Department of Public Works
Crossborder Energy
Davis Wright Tremaine LLP
Day Carter Murphy
Defense Energy Support Center
Dept of General Services
Division of Ratepayer Advocates
Douglass & Liddell
Downey & Brand
Ellison Schneider & Harris LLP
G. A. Krause & Assoc.
GenOn Energy Inc.
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie
Green Power Institute
Hanna & Morton
In House Energy
International Power Technology
Intestate Gas Services, Inc.
K&L Gates LLP
Kelly Group
Linde
Los Angeles Dept of Water & Power
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenna Long & Aldridge LLP
McKenzie & Associates
Modesto Irrigation District
Morgan Stanley
NLine Energy, Inc.
NRG Solar
Nexant, Inc.
North America Power Partners
Occidental Energy Marketing, Inc.
OnGrid Solar
Pacific Gas and Electric Company
Praxair
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions
SCE
SDG&E and SoCalGas
SPURR
San Francisco Public Utilities Commission
Seattle City Light
Sempra Utilities
SoCalGas
Southern California Edison Company
Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
Tiger Natural Gas, Inc.
TransCanada
Utility Cost Management
Utility Power Solutions
Utility Specialists
Verizon
Water and Energy Consulting
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)