

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4692  
October 16, 2014

**REDACTED**  
**RESOLUTION**

**Resolution E-4692.** Pacific Gas and Electric Company (PG&E) requests Commission approval of a renewable energy power purchase agreement with RE Astoria, LLC.

**PROPOSED OUTCOME:**

- This resolution approves cost recovery for the long-term renewable energy power purchase agreement between PG&E and RE Astoria, LLC. The power purchase agreement is approved without modification.

**SAFETY CONSIDERATIONS:**

- The power purchase agreement requires the seller of the generation to comply with all applicable safety requirements of law relating to the project.

**ESTIMATED COST:**

- Actual costs of the power purchase agreement are confidential at this time.

By Advice Letter 4355-E filed on February 7, 2014.

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**SUMMARY**

**Pacific Gas and Electric Company's (PG&E) renewable energy power purchase agreement (PPA) with RE Astoria, LLC (RE Astoria) complies with the Renewables Portfolio Standard (RPS) procurement guidelines and is approved without modification.**

PG&E filed Advice Letter (AL) 4355-E on February 7, 2014, requesting California Public Utilities Commission (Commission) review and approval of a fifteen year renewable energy PPA between PG&E and RE Astoria, which is owned by Recurrent Energy, LLC (Recurrent). The PPA was procured through PG&E's 2012 RPS solicitation (RFO). Pursuant to the PPA, RPS-eligible generation will be

purchased from the RE Astoria facility. The RE Astoria facility's capacity is 100 megawatts (MW), and the facility will be located in Rosamond, California.

This resolution approves the RE Astoria PPA. PG&E's execution of this PPA is consistent with PG&E's 2012 RPS Procurement Plan (RPS Plan), including its resource need, which the Commission approved in Decision 12-11-016. In addition, RPS deliveries under the RE Astoria PPA are reasonably priced. The costs of the RE Astoria PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

The following table provides a summary of the RE Astoria PPA:

**Table 1: Summary of RE Astoria PPA**

<b>Generating Facility</b>	<b>Technology Type</b>	<b>Capacity (MW)</b>	<b>Expected Deliveries (GWh/yr)</b>	<b>Contract Start Date</b>	<b>Term (Years)</b>	<b>Location</b>
RE Astoria	Solar photovoltaic (PV), New	100	298	January 3, 2019	15	Rosamond, CA

## **BACKGROUND**

### **Overview of the Renewables Portfolio Standard Program**

The California RPS program was established by Senate Bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036, and SB 2 (1X).<sup>1</sup> The RPS program is codified in Pub. Util. Code §§399.11-399.32.<sup>2</sup> Under SB 2 (1X), the RPS program administered by the Commission requires each retail seller to procure eligible renewable energy resources so that the amount of electricity generated from eligible renewable resources be an amount that equals an average of 20 percent of the total electricity sold to retail customers in California

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<sup>1</sup> SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007); SB 2 (1X) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

<sup>2</sup> All further references to sections refer to Public Utilities Code unless otherwise specified.

for compliance period 2011-2013; 25 percent of retail sales by December 31, 2016; and 33 percent of retail sales by December 31, 2020.<sup>3</sup>

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at <http://www.cpuc.ca.gov/PUC/energy/Renewables/overview> and <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

### **NOTICE**

Notice of AL 4355-E was made by publication in the Commission's Daily Calendar. PG&E states that copies of the AL were mailed and distributed in accordance with Section IV of General Order (GO) 96-B.

### **PROTESTS**

PG&E's AL 4355-E was not protested.

### **DISCUSSION**

#### **Pacific Gas & Electric Company requests approval of a renewable energy power purchase agreement with RE Astoria.**

On February 25, 2014, PG&E filed AL 4355-E requesting Commission approval of a long-term PPA with RE Astoria. The RE Astoria PPA concerns generation from the 100 MW RE Astoria facility, which is contracted to deliver energy, renewable energy credits, capacity attributes, and any ancillary services beginning January 3, 2019. Pursuant to the RE Astoria PPA, PG&E will receive approximately 381 gigawatt-hours (GWh) of RPS-eligible deliveries annually.

The RE Astoria facility is located in Kern County, CA and has its first point of interconnection with the California Independent System Operator (CAISO), a California balancing authority. The PPA under consideration has a term of 15 years and begins deliveries on January 3, 2019.

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<sup>3</sup> D.11-12-020 established a methodology to calculate procurement requirement quantities for the three different compliance periods covered in SB 2 (1X) (2011-2013, 2014-2016, and 2017-2020).

**PG&E requests that the Commission issue a resolution 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 an eligible renewable energy resource 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 (Pub. Util. Code §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 Pub. Util. Code §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 Emissions Performance Standard (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 paragraph 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 Section 399.16(b)(1)(A), subject to the Commission's after-the-fact verification that all applicable criteria have been met.

**Energy Division Evaluated the RE Astoria PPA on the Following Criteria:**

- Consistency with PG&E's 2012 RPS Procurement Plan
- Consistency with PG&E's Least-Cost, Best-Fit (LCBF) requirements
- Consistency with RPS Standard Terms and Conditions (STCs)
- Consistency with Portfolio Content Category (PCC) Requirements
- Consistency with Long-Term Contracting Requirement
- Independent Evaluator (IE) review
- Price Reasonableness and Value
- Project Viability Assessment and Development Status
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)
- Procurement Review Group Participation
- Public Safety

**Consistency with PG&E's 2012 RPS Procurement Plan**

California's RPS statute requires the Commission to direct each utility to prepare an annual RPS Plan and then review and accept, modify, or reject the Plan prior to the commencement of a utility's annual RPS RFO.<sup>4</sup> The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan.

The RE Astoria PPA was executed on December 16, 2013. At the time the PPA was executed, PG&E's most recent Commission-approved Plan was its 2012 Plan, which was conditionally approved in D.12-11-016 on November 14, 2012. Pursuant to statute, PG&E's Plan includes an assessment of supply and demand to determine the optimal mix of renewable generation resources, consideration of

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<sup>4</sup> Pub. Util. Code, §399.14.

flexible compliance mechanisms established by the Commission, and a bid solicitation protocol setting forth the need for renewable generation of various operational characteristics.<sup>5</sup>

In PG&E's 2012 RPS Plan, PG&E stated that it seeks to procure about 1,000 GWh of new generation in its 2012 RPS RFO, with a preference for long-term contracts that qualify as a PCC 1 product with initial RPS deliveries starting in 2019-2020.<sup>6</sup>

The RE Astoria PPA fits within PG&E's stated RPS procurement goal of an additional 1,000 GWh annually. Additionally, the PPA is long-term and PG&E expects the RPS deliveries to satisfy the criteria of PCC 1. The RE Astoria PPA will begin delivering in 2019 and any deliveries from the RE Astoria PPA that are in excess of PG&E's RPS procurement quantity requirement could be used by PG&E to satisfy future RPS compliance needs.

The RE Astoria PPA is consistent with PG&E's 2012 RPS Procurement Plan, as approved by D.12-11-016.

### **PG&E's RPS Portfolio Need**

The California RPS Program was established by SB 1078 and was modified by SB 2 (1X), which became effective on December 10, 2011. SB 2 (1X) made significant changes to the RPS Program.<sup>7</sup> SB2 (1X) established new RPS procurement targets such that retail sellers must procure "...from January 1, 2011 to December 31, 2013...an average of 20 percent of retail sales...25 percent of retail sales by December 31, 2016, and 33 percent of retail sales by December 31, 2020."<sup>8</sup>

PG&E currently projects that its existing RPS portfolio will provide enough RPS generation to meet its needs in Compliance Period (CP) 1 (2011-2013) and CP 2 (2014-2016). Beginning in CP 3 (2017-2020), PG&E has stated that it has a need to procure additional RPS generation. The RE Astoria PPA is contracted to begin delivering RPS-eligible energy on January 3, 2019, which aligns with

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<sup>5</sup> Pub. Util. Code, §399.14(a)(3).

<sup>6</sup> PCCs were defined in D.11-12-052.

<sup>7</sup> The Commission opened Rulemaking (R.) 11-05-005 (May 5, 2011) to implement SB2 (1X).

<sup>8</sup> See Pub. Util. Code, §399.15(b)(2)(B), SB 2 (1X).

PG&E's RPS need beginning at the end of CP3. See confidential appendix A for a detailed discussion on PG&E's RPS need.

RPS generation from the RE Astoria PPA fits the portfolio need requirements of PG&E's RPS portfolio.

### **Consistency with PG&E's Least-Cost Best-Fit Methodology**

The basic components of PG&E's LCBF evaluation and selection criteria and process for RPS PPAs were established in the Commission's LCBF Decisions D.03-06-071, D.04-07-029 and D.12-11-016. Consistent with these decisions, the four main LCBF evaluation steps undertaken by PG&E are:

1. Determination of market value of bid;
2. Calculation of transmission adders and integration costs;
3. Evaluation of portfolio fit; and
4. Consideration of non-price factors.

The LCBF decisions direct the utilities to use certain criteria in their bid selection. The decisions offer guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations.

The RE Astoria PPA was selected from PG&E's 2012 RPS RFO. When compared against offers from PG&E's 2012 RPS RFO using its Commission-approved 2012 LCBF methodology, the RE Astoria PPA compares favorably for price, value, viability, and need. See Confidential Appendix A for more details.

PG&E adequately examined the reasonableness of the RE Astoria PPA utilizing its LCBF methodology.

### **Consistency with RPS Standard Terms and Conditions**

The Commission adopted a set of STCs required in RPS contracts, three of which are considered "non-modifiable." The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. More recently, they were amended in D.10-03-021, as modified by D.11-01-025, and D.13-11-024.

The RE Astoria PPA includes the Commission adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, D.10-03-021, as modified by D.11-01-025, and D.13-11-024.

### **Consistency with Portfolio Content Category Requirements**

In D.11-12-052, the Commission defined and implemented PCCs for the RPS program and authorized the Director of Energy Division to require the investor-owned utilities (IOUs) to provide information regarding the proposed contract's PCC classification in each AL seeking Commission approval of an RPS contract. The purpose of the information is to allow the Commission to evaluate the claimed PCC of the proposed RPS PPA and the risks and value to ratepayers if the proposed PPA ultimately results in renewable energy credits in another PCC.

In AL 4355-E, PG&E claims that the product procured pursuant to RE Astoria PPA will be classified as PCC 1. To support its claim, PG&E asserts that the RE Astoria PPA meets the upfront showing required for PCC 1 because it is an in-state RPS resource that expects to have its first point of interconnection with the CAISO, a California balancing authority.

Consistent with D.11-12-052, PG&E provided information in AL 4355-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the RE Astoria PPA.

### **Consistency with Long-Term Contracting Requirement**

In D.12-06-038, the Commission established a long-term contracting requirement that must be met in order for retail sellers to count RPS procurement from contracts less than 10 years in duration for compliance with the RPS program.<sup>9</sup> In order for the procurement from any short-term contract(s) signed after June 1, 2010, to count for RPS compliance, the retail seller must execute long-term contract(s) in the same compliance period in which the short-term contract(s) is signed. The volume of expected generation in the long-term contract(s) must be sufficient to cover the volume of generation from the short-term contract(s).<sup>10</sup>

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<sup>9</sup> For the purposes of the long-term contracting requirement, contracts of less than 10 years duration are considered "short-term" contracts. (D.12-06-038).

<sup>10</sup> Pursuant to D.12-06-038, the methodology setting the long-term contracting requirement is: 0.25% of Total Retail Sales in 2010 for the first compliance period; 0.25% of Total Retail Sales in 2011-2013 for the second compliance period; and 0.25% of Total Retail Sales in 2014-2016 for the third compliance period.



Because the RE Astoria PPA is greater than 10 years in length, the PPA will contribute to PG&E's long-term contracting requirement established in D.12-06-038.

### **Independent Evaluator Review**

PG&E retained IE Arroyo Seco Consulting Group (Arroyo) to oversee its 2012 RPS RFO and to evaluate the overall merits of each PPA submitted to the Commission for approval. Arroyo compared the price and value of the RE Astoria PPA against competing offers from PG&E's 2012 RPS RFO using Arroyo's proprietary evaluation model. Based on this comparison, Arroyo opines that the RE Astoria PPA ranks low for price and quite high for value when compared against relevant peer groups of competing proposals. Additionally, Arroyo opines that the RE Astoria PPA ranks moderate for viability. The IE recommends that the Commission approve the RE Astoria PPA. See Appendix B for a detailed explanation of the IE's findings.

Consistent with D.06-05-039, an independent evaluator oversaw PG&E's RPS procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations and compared the costs, value and viability of the RE Astoria PPA against peer groups consisting of alternative competing proposals currently or recently available to PG&E.

### **Price Reasonableness and Value**

The Commission's price reasonableness review for RPS PPAs includes a comparison of the proposed PPA's price against other RPS offers received in the 2012 RPS RFO and against contracts executed in the 12 months prior to the proposed PPA's execution date. Using this analysis and the confidential analysis provided by PG&E in AL 4355-E, the Commission determines that the price and value of the RE Astoria PPA are reasonable. See Confidential Appendix A for a price and value comparison of the RE Astoria PPA against the appropriate cohorts.

The RE Astoria PPA ranks favorably for price and value when compared against competing RPS offers from PG&E's 2012 RPS solicitation and contracts executed by PG&E 12 months prior to executing the RE Astoria PPA.

Payments made by PG&E under the RE Astoria PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA and any other applicable Commission review.

## **Project Viability Assessment**

Arroyo provided the following viability information about the RE Astoria facility and its development status in its IE Report. See Confidential Appendix A for a more detailed discussion of the RE Astoria PPA.

### *Project development experience*

Recurrent has experience developing solar PV projects across the United States and Canada. However, Recurrent Energy does not yet have experience developing, constructing, and bringing into operation a single PV facility as large as 100 MW, the proposed capacity of the RE Astoria facility. Recurrent 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*

Recurrent's business model has historically involved selling whole or majority ownership of solar projects it develops to other owners, before or upon start of commercial operations. Press reports about the expected sale of five of its Southern California projects to indicate that Recurrent will continue to manage the facilities without an ownership share.

### *Manufacturing Capacity*

Vendors that Recurrent has used in the past to supply modules for other projects do not appear to have any supply chain constraints that would prevent them from meeting the needs for the RE Astoria facility.

### *Permitting<sup>11</sup>*

RE Astoria has applied to Kern County for a conditional use permit (CUP) and the application was deemed complete on January 25, 2013. A draft environmental impact report (EIR) was published by Kern County on September 2, 2014. Recurrent has previously obtained CUPs for several PV projects sited in Kern County, but has recently experienced some adverse community reaction related to construction of projects in the Mojave Desert.

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<sup>11</sup> Permitting information was updated with more recent information from a PG&E data request.

*Reasonableness of Commercial Online Date*

In Arroyo's opinion it is reasonable to expect RE Astoria to come on-line at the guaranteed COD of January 3, 2019.

It is reasonable to expect that Recurrent will be able to meet the terms and conditions in the RE Astoria power purchase agreement.

**Compliance with the Interim Greenhouse Gas Emissions Performance Standard**

Pub. Util. Code §§8340 and 8341 require that the Commission consider emissions costs associated with new long-term (five years or greater) baseload power contracts procured on behalf of California ratepayers.<sup>12</sup>

D.07-01-039 adopted an interim EPS that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas emissions of a combined-cycle gas turbine power plant. Generating facilities using certain renewable resources are deemed compliant with the EPS.<sup>13</sup>

The RE Astoria PPA is not covered procurement subject to the EPS because the generating facility has a forecast annualized capacity factor of less than 60 percent, and therefore it is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim EPS Rules.

**Procurement Review Group Participation**

The PRG was initially established in D.02-08-071 to review and assess the details of the IOU's overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission as a mechanism for procurement review by non-market participants.

PG&E asserts that participants in its PRG included representatives from the 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. The RE Astoria PPA was

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<sup>12</sup> "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%."  
Pub. Util. Code §8340 (a).

<sup>13</sup> D.07-01-039, Attachment 7, p. 4.

presented to the PRG as a potential contract for execution at PG&E's November 12, 2013 PRG meeting.

Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the RE Astoria PPA.

### **Public Safety**

Pub. Util. Code §451 requires that every public utility maintain adequate, efficient, just, and reasonable service, instrumentalities, equipment and facilities to ensure the safety, health, and comfort of the public.

Local, state and federal agencies that have review and approval authority over the RE Astoria facility are charged with enforcing safety, environmental and other regulations including decommissioning. Section 3.9(a) of the PPA requires Recurrent (the entity with control over on-site decisions) to "acquire all permits and other approvals necessary for the construction, operation and maintenance of the RE Astoria project." The safety provisions in the RE Astoria PPA clarify that the burden of safe operations and the duty to protect PG&E customers against bearing the cost of imprudent or unsafe operations resides with Recurrent.

### **RPS ELIGIBILITY AND CPUC APPROVAL**

Pursuant to Pub. Util. Code §399.13, the California Energy Commission (CEC) certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS PPA, the Commission has required standard and non-modifiable "eligibility" language in all RPS PPAs. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an "Eligible Renewable Energy Resource," that the project's output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.<sup>14</sup>

The Commission requires a standard and non-modifiable clause in all RPS PPAs that requires "CPUC Approval" of a PPA to include an explicit finding that "any procurement pursuant to this Agreement is procurement from an eligible

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<sup>14</sup> See, e.g. D.08-04-009 at Appendix A, STC 6, Eligibility.

renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Pub. Util. Code §99.11 et seq.), D.11-12-020 and D.11-12-052, or other applicable law.”<sup>15</sup>

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is not an eligible renewable energy resource, nor can the Commission determine prior to final CEC certification of a project, that “any procurement” pursuant to a specific contract will be “procurement from an eligible renewable energy resource.”

Therefore, while we include the required finding here, this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS-eligible resource to count towards an RPS compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract enforcement activities shall be reviewed pursuant to the Commission’s authority to review the utilities’ administration of such contracts.

### **CONFIDENTIAL INFORMATION**

The Commission, in implementing Pub. Util. Code §454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS RFOs. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS contracts. Such information, such as price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

The confidential appendices, marked "[REDACTED]" in the public copy of this resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

### **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment

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<sup>15</sup> See, e.g. D.08-04-009 at Appendix A, STC 1, CPUC Approval.

prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments on September 15, 2014. No comments were received.

## **FINDINGS AND CONCLUSIONS**

1. The RE Astoria power purchase agreement is consistent with PG&E's 2012 Renewables Portfolio Standard Procurement Plan, as approved by D.12-11-016.
2. Renewable energy generation from the RE Astoria power purchase agreement fits the portfolio need requirements of PG&E's Renewables Portfolio Standard portfolio.
3. PG&E adequately examined the reasonableness of the RE Astoria power purchase agreement utilizing its least-cost best-fit methodology.
4. The RE Astoria power purchase agreement includes the Commission adopted Renewables Portfolio Standard "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, D.10-03-021, as modified by D.11-01-025, and D.13-11-024.
5. Consistent with D.11-12-052, PG&E provided information in Advice Letter 4355-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the RE Astoria power purchase agreement.
6. Because the RE Astoria power purchase agreement is greater than 10 years in length, the power purchase agreement will contribute to PG&E's long-term contracting requirement established in D.12-06-038.
7. Consistent with D.06-05-039, an independent evaluator oversaw PG&E's Renewables Portfolio Standard procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations with Recurrent and compared the costs, value and viability of the RE Astoria power purchase agreement against peer groups consisting of alternative competing proposals currently or recently available to PG&E.
8. The RE Astoria power purchase agreement ranks favorably for price and value when compared against competing Renewables Portfolio Standard

offers from PG&E's 2012 Renewables Portfolio Standard solicitation and contracts executed by PG&E 12 months prior to executing the RE Astoria power purchase agreement.

9. Payments made by PG&E under the RE Astoria power purchase agreement are fully recoverable in rates over the life of the power purchase agreement, subject to Commission review of PG&E's administration of the power purchase agreement and any other applicable Commission review.
10. It is reasonable to expect that Recurrent will be able to meet the terms and conditions in the RE Astoria power purchase agreement.
11. The RE Astoria power purchase agreement is not covered procurement subject to the Emissions Performance Standard because the generating facility has a forecast annualized capacity factor of less than 60 percent, and therefore, it is not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim Emissions Performance Standard Rules.
12. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the RE Astoria power purchase agreement.
13. The confidential appendices, marked "[REDACTED]" in the public copy of this Resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
14. Procurement pursuant to the RE Astoria power purchase agreement is procurement from an eligible renewable energy resource 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 Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), D.03-06-071 and D.06-10-050, or other applicable law.
15. The immediately preceding finding shall not be read to allow generation from a non-Renewables Portfolio Standard eligible renewable energy resource under this power purchase agreement to count towards an RPS compliance obligation. Nor shall that finding absolve PG&E of its obligation to enforce compliance with this power purchase agreement.
16. Advice Letter 4355-E should be approved effective today.

**THEREFORE IT IS ORDERED THAT:**

1. Pacific Gas & Electric Company's Advice Letter 4355-E requesting Commission review and approval of a power purchase agreement with RE Astoria, LLC is approved without modification.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held in San Francisco on October 16, 2014; the following Commissioners voting favorably thereon:

*/s/ Paul Clanon* \_\_\_\_\_  
PAUL CLANON  
Executive Director

MICHAEL R. PEEVEY  
President  
MICHEL PETER FLORIO  
CATHERINE J.K. SANDOVAL  
CARLA J. PETERMAN  
MICHAEL PICKER  
Commissioners



## **Confidential Appendix A**

Price/Value Reasonableness, Need, and Viability

[REDACTED]

## **Appendix B**

### Independent Evaluator Conclusions and Recommendations

### **Discussion of Merit for Approval<sup>16</sup>**

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

- The PPA price (both before and after adjustment for TOD factors) ranks low when compared to all offers received in PG&E's 2012 RPS RFO or to the proposals that PG&E selected for its shortlist.
- PG&E's estimate of PAV ranks the PPA as high compared to all offers from PG&E's 2012 RFO. Arroyo's independent analysis ranks the PPA as quite high in net value when compared to all offers from PG&E's 2012 RFO.
- 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 Arroyo believes that RE Astoria should be able to meet its guaranteed COD.
- The RE Astoria PPA ranks moderate to high in portfolio fit when compared against all of PG&E's 2012 RPS RFO offers 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 that was fair to both competitors and ratepayers.

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<sup>16</sup> Arroyo's "Report of the Independent Evaluator on a Contract with RE Astoria, LLC", pages 32-33.

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

## **Confidential Appendix C**

RE Astoria PPA Major Contract Provisions

[REDACTED]