

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Item #23  
I.D. #8137  
RESOLUTION E-4216  
December 18, 2008

REDACTED

R E S O L U T I O N

Resolution E-4216. Pacific Gas and Electric Company (PG&E) requests approval of a renewable resource procurement contract, with Klondike III Wind Power Project, LLC in Sherman County, Oregon and a firming and shaping agreement with Bonneville Power Administration (collectively, the Agreements). The Agreements are approved without modification.

By Advice Letter 3322-E filed on August 21, 2008.

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**SUMMARY**

**PG&E's renewable contract complies with the Renewables Portfolio Standard (RPS) guidelines and is approved without modification**

PG&E filed Advice Letter (AL) 3322-E on August 21, 2008, requesting Commission review and approval of a power purchase agreement (PPA) executed with Klondike III Wind Power Project, LLC (Klondike IIIa) and an associated firming and shaping agreement with Bonneville Power Authority (BPA). PG&E's proposed agreements, which result from bilateral negotiations, concern new incremental wind generation. PG&E's request for approval of a renewable PPA is granted pursuant to Decision (D.) 07-02-011 which approved PG&E's 2007 RPS Procurement Plan and the bilateral contracting guidelines set forth in prior Commission decisions. The energy acquired from this PPA will count towards PG&E's RPS requirements.

Project	Resource Type	Term	Total Capacity (MW)	Annual Deliveries (GWh)	Online Date	Project Location
Klondike IIIa	Wind	10 years	90 MW	Year 1-5: • 263 GWh Year 6-10: • Min 132 GWh • Max 263 GWh	12/31/2008	Sherman County, Oregon

Deliveries from the PPA are reasonably priced and fully recoverable in rates over the life of the contract; subject to Commission review of PG&E's administration of the contract.

**Confidential information about the contract should remain confidential**

This resolution finds that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583, General Order (G.O.) 66-C, and D.06-06-066 should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

**BACKGROUND**

The California Renewables Portfolio Standard (RPS) Program was established by Senate Bill 1078<sup>1</sup> and codified by California Pub. Util. Code Section 399.11, et seq. The statute required that a retail seller of electricity such as PG&E purchase a certain percentage of electricity generated by Eligible Renewable Energy Resources (ERR). Originally, each utility was required to increase its total procurement of ERRs by at least 1 percent of annual retail sales per year until 20 percent is reached, subject to the Commission's rules on flexible compliance, no later than 2017.

The State's Energy Action Plan (EAP) called for acceleration of this RPS goal to reach 20 percent by 2010.<sup>2</sup> This was reiterated again in the Order Instituting Rulemaking (R.04-04-026) issued on April 28, 2004,<sup>3</sup> which encouraged the utilities to procure cost-effective renewable generation in excess of their RPS annual procurement targets (APTs)<sup>4</sup>, in order to make progress towards the goal expressed in the EAP. On September 26, 2006, Governor Schwarzenegger signed

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<sup>1</sup> Chapter 516, statutes of 2002, effective January 1, 2003 (SB 1078)

<sup>2</sup> The Energy Action Plan was jointly adopted by the Commission, the California Energy Resources Conservation and Development Commission (CEC) and the California Power Authority (CPA). The Commission adopted the EAP on May 8, 2003.

<sup>3</sup> [http://www.cpuc.ca.gov/Published/Final\\_decision/36206.htm](http://www.cpuc.ca.gov/Published/Final_decision/36206.htm)

<sup>4</sup> APT - An LSE's APT for a given year is the amount of renewable generation an LSE must procure in order to meet the statutory requirement that it increase its total eligible renewable procurement by at least 1% of retail sales per year.

Senate Bill (SB) 107,<sup>5</sup> which officially accelerates the State's RPS targets to 20 percent by 2010, subject to the Commission's rules on flexible compliance.<sup>6</sup>

### **CPUC has established procurement guidelines for the RPS Program**

The Commission has issued a series of decisions that establish the regulatory and transactional parameters of the utility renewables procurement program. On June 19, 2003, the Commission issued its "Order Initiating Implementation of the Senate Bill 1078 Renewable Portfolio Standard Program," D.03-06-071.<sup>7</sup> On June 9, 2004, the Commission adopted its Market Price Referent (MPR) methodology<sup>8</sup> for determining the Utility's share of the RPS seller's bid price, as defined in Pub. Util. Code Sections 399.14(a)(2)(A) and 399.15(c). On the same day the Commission adopted standard terms and conditions for RPS power purchase agreements in D.04-06-014 as required by Pub. Util. Code Section 399.14(a)(2)(D). Instructions for evaluating the value of each offer to sell products requested in a RPS solicitation were provided in D.04-07-029.<sup>9</sup>

On December 15, 2005, the Commission adopted D.05-12-042 which refined the MPR methodology for the 2005 RPS Solicitation.<sup>10</sup> Subsequent resolutions adopted MPR values for the 2005, 2006 and 2007 RPS Solicitations.<sup>11</sup> In addition, D.06-10-050, as modified by D.07-03-046 and D.08-05-029,<sup>12</sup> further refined the RPS reporting and compliance methodologies.<sup>13</sup> In this decision, the

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<sup>5</sup> Chapter 464, Statutes of 2006 (SB 107)

<sup>6</sup> Pub. Util. Code Section 399.14(a)(2)(C)

<sup>7</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/27360.PDF](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/27360.PDF)

<sup>8</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/37383.pdf](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/37383.pdf)

<sup>9</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/38287.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/38287.PDF)

<sup>10</sup> [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/52178.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_DECISION/52178.pdf)

<sup>11</sup> Respectively, Resolution E-3980:

[http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_RESOLUTION/55465.DOC](http://www.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/55465.DOC),

Resolution E-4049:

[http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_RESOLUTION/63132.doc](http://www.cpuc.ca.gov/word_pdf/FINAL_RESOLUTION/63132.doc), Resolution E-

4118: [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_RESOLUTION/73594.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_RESOLUTION/73594.pdf)

<sup>12</sup> D.08-05-029 adopted RPS rules specific for small and multi-jurisdictional utilities.

[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/83534.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/83534.PDF)

Commission established methodologies to calculate an LSE's initial baseline procurement amount, annual procurement target (APT) and incremental procurement amount (IPT).<sup>14</sup>

More recently, the Commission has implemented Pub. Util. Code 399.14(b)(2), which states that before the Commission can approve an RPS contract of less than ten years' duration, the Commission must establish "for each retail seller, minimum quantities of eligible renewable energy resources to be procured either through contracts of at least 10 years' duration (long-term contracts) or from new facilities commencing commercial operations on or after January 1, 2005." On May 3, 2007, the Commission approved D.07-05-028, which established a minimum percentage of the prior year's retail sales (0.25%) that must be procured with contracts of at least 10 years' duration or from new facilities in order for short-term contracts to be used towards RPS compliance.

### **The Commission has established bilateral procurement guidelines for the RPS Program**

While the focus of the RPS program is procurement through competitive solicitations, D.03-06-071 allows for a utility and a generator to enter into bilateral contracts outside of the competitive solicitation process. Specifically, D.03-06-071 states that bilateral contracts will only be allowed if they do not require Public Goods Charge (PGC) funds. In D.06-10-019, the Commission interprets D.03-06-071, stating that bilaterals are not eligible for Supplemental Energy Payments (SEPs) and bilateral contracts must be deemed reasonable. Further, the decision requires bilateral contracts of any length to be submitted to the Commission for approval by advice letter.<sup>15</sup>

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<sup>13</sup> D.06-10-050, Attachment A, [http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/61025.PDF](http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/61025.PDF) as modified by D.07-03-046, [http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/65833.PDF](http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/65833.PDF).

<sup>14</sup> The IPT represents the amount of RPS-eligible procurement that the LSE must purchase, in a given year, over and above the total amount the LSE was required to procure in the prior year. An LSE's IPT equals at least 1% of the previous year's total retail electrical sales, including power sold to a utility's customers from its DWR contracts.

<sup>15</sup> See D.06-10-019 pp. 31

Since D.06-10-019 was adopted, SB 1036 halted the portion of the PGC fund collection that went to the SEP fund, returned the collected SEPs to the utilities, and moved above-MPR cost recovery to the Commission.<sup>16</sup> While SB 1036 reformed the SEP process, bilateral contracts are still ineligible for AMFs.<sup>17</sup>

In D.06-10-019, the Commission stated it will be developing evaluation criteria for bilateral RPS contracts. In the interim, however, utilities' bilateral contracts may be approved as long as they follow the four requirements mentioned above:

- the contract is submitted for approval by advice letter
- the contract is longer than one month in duration
- the contract does not receive AMFs
- the contract is deemed reasonable by the Commission

### **CPUC requires standard terms and conditions for RPS contracts**

The Commission set forth standard terms and conditions (STCs) to be incorporated into RPS agreements, including bilateral contracts, in D.04-06-014 (as modified by several subsequent decisions).<sup>18, 19</sup> The Commission originally identified several STCs in confidential Appendix B of D.04-06-014 as "may not be modified". On November 16, 2007, the Commission adopted D.07-11-025, which reduced the number of non-modifiable terms from nine to four and refined the language of some of these terms in response to an amended petition for modification of D.04-06-014.<sup>20</sup> The remaining non-modifiable STCs include "CPUC Approval", "Definition of RECs and Green Attributes", "Eligibility" and

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<sup>16</sup> See Resolution E-4160

[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_RESOLUTION/81476.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/81476.PDF)

<sup>17</sup> Pub. Util. Code §399.15(d)(2)(A).

<sup>18</sup> D.07-02-011 (as modified by D.07-05-057)

[http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/68383.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_DECISION/68383.pdf)

<sup>19</sup> D.07-11-025, Attachment A

[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/75354.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/75354.PDF)

<sup>20</sup> On February 1, 2007, PG&E and SCE jointly filed a petition for modification of D.04-06-014. On May 22, 2007, a PD was filed and served. Prior to the PD being voted on by the Commission, PG&E and SCE filed an amended petition for modification of D.04-06-014.

“Applicable law”. On April 10, 2008 the Commission adopted D.08-04-009, which compiled RPS STCs into one decision.<sup>21</sup> Most recently, on August 21, 2008 the Commission adopted D.08-08-028, which clarified STC #2 the “Definition of RECs and Green Attributes.”<sup>22</sup>

### **California Energy Commission (CEC) certifies out-of-state facilities for RPS compliance**

The CEC is responsible for certifying the RPS-eligibility of renewable facilities located out-of-state which have their first point of interconnection to the WECC transmission system. The guidelines for certifying out-of-state facilities can be found in the CEC’s *Renewables Portfolio Standard Eligibility Guidebook*.<sup>23</sup>

### **Interim Greenhouse Gas Emissions Performance Standard (EPS) established emission rate limitations for long-term electricity procurement**

A greenhouse gas emissions performance standard (EPS) was established by Senate Bill 1368,<sup>24</sup> 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.

On January 25, 2007, the Commission approved D.07-01-039 which adopted an interim EPS that establishes an emission rate quota for obligated facilities to levels no greater than the GHG emissions of a combined-cycle gas turbine (CCGT) powerplant.<sup>25</sup> The EPS applies to all long-term energy contracts for baseload generation.<sup>26</sup> Renewable energy contracts are deemed EPS compliant

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<sup>21</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/81269.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/81269.PDF)

<sup>22</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/86954.pdf](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/86954.pdf)

<sup>23</sup> <http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF>

<sup>24</sup> Chapter 598, Statutes of 2006 (SB 1368)

<sup>25</sup> D.07-01-039, which implements SB 1368, adopted an emission rate of 1,100 pounds of carbon dioxide per megawatt-hour for the proxy CCGT (section 1.2, page 8)  
[http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/64072.PDF](http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/64072.PDF)

<sup>26</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%.” § 8340 (a)

except in cases where intermittent renewable energy is shaped and firmed with generation from non-renewable resources.<sup>27</sup> If the renewable energy contract is shaped and firmed with a specified energy source that is considered baseload generation, then the energy source must individually meet the EPS. If, however, the intermittent energy is firmed and shaped with an unspecified energy source (e.g. system power), then D.07-01-039 specifically requires that the amount of substitute energy purchases from unspecified resources do not exceed the total expected output of the specified renewable powerplant over the term of the contract.<sup>28</sup>

### **PG&E requests approval of renewable energy contract**

On August 21, 2008 PG&E filed AL 3322-E requesting Commission approval of a renewable procurement contract and an associated firming and shaping agreement. The Agreements result from bilateral negotiations. If approved, PG&E is authorized to accept future deliveries of incremental supplies of renewable resources and contribute towards the 20 percent renewables procurement goal required by California's RPS statute.<sup>29</sup>

### **PG&E requests final "CPUC Approval" of PPA**

PG&E requests that Commission approve a resolution which:

1. Approves the Agreements in their entirety, including payments to be made by PG&E pursuant to the Agreements, subject to the Commission's review of PG&E's administration of the Agreements.

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<sup>27</sup> Terms "shaping" and "firming" are defined in the CPUC Report, "RENEWABLE ENERGY CERTIFICATES AND THE CALIFORNIA RENEWABLES PORTFOLIO STANDARD PROGRAM," refer to page 20 and A-1, respectively. "Shaping" refers to contractual arrangements whereby renewable energy, like the output of a wind generator, is delivered to some third party, displacing the output from some flexible resource, typically a hydro facility. This, in effect, stores the renewable energy which is then redelivered to the purchasing LSE at some later time. "Firming" refers to the process by which a backup resource is used to supplement the output of an intermittent resource to ensure that the total energy provided is sufficient to meet customer load.

<sup>28</sup> See D.07-01-039, Section 1.4.

<sup>29</sup> California Public Utilities Code section 399.11 et seq., as interpreted by D.03-07-061, the "Order Initiating Implementation of the Senate Bill 1078 Renewables Portfolio Standard Program", and subsequent CPUC decisions in R.04-04-026; R.06-02-012; R.06-05-027 and R.08-08-009.

2. Finds that any procurement pursuant to the Agreements 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.) ("RPS"), Decision ("D.") 03-06-071 and D.06-10-050, or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code section 399.14(g), associated with the PPA shall be recovered in rates.
4. Adopts the following finding of fact and conclusion of law in support of PPA cost recovery:
  - a. The PPA is consistent with PG&E's approved 2007 RPS procurement plan.
  - b. The terms of the Agreements, including the price of delivered energy, are reasonable.
5. Adopts the following finding of fact and conclusion of law in support of PPA cost recovery for the PPA:
  - a. The utility's cost of procurement under the Agreements shall be recovered through PG&E's Energy Resource Recovery Account.
  - b. Any stranded costs that may arise from the PPA are 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 being addressed in Rulemaking ("R.") 06-02-013.
6. Adopts the following findings with respect to resource compliance with the Emissions Performance Standard ("EPS") adopted in R.06-04-009:
  - a. Arlington's renewable generating facility is an intermittent renewable energy resource, for purposes of compliance with the EPS.
  - b. The generating facility employs wind technology.
  - c. The renewable resource is pre-approved as compliant with the EPS.

- d. The use of system energy to deliver electricity under the terms of the Agreements is consistent with the Commission's adopted EPS.

**In D.02-08-071, the Commission required each utility to establish a Procurement Review Group (PRG).**

The members of a PRG, subject to an appropriate non-disclosure agreement, have the right to consult with the utilities and review the details of each utility's:

1. Overall transitional procurement needs and strategy;
2. Proposed procurement processes including, but not limited to, the requests for offers (RFOs); and
3. Proposed procurement contracts before any of the contracts are submitted to the Commission for expedited review and approval.

The PRG for PG&E consists of: California Department of Water Resources (DWR), the Commission's Energy Division, Natural Resources Defense Council (NRDC), Union of Concerned Scientists (UCS), Division of Ratepayer Advocates (DRA), Coalition of California Utility Employees (CUE) and The Utility Reform Network (TURN).

PG&E informed the PRG of the proposed transaction on March 14, 2008, April 11, 2008 and July 25, 2008. The PRG did not object to PG&E's decision to enter into this contract or PG&E's decision to submit it for CPUC approval by advice letter.

Although Energy Division is a member of the PRG, it reserved judgment on the contracts until the advice letter was filed. Energy Division reviewed the transaction independently of the PRG, and allowed for a full protest period before concluding its analysis.

**NOTICE**

Notice of AL 3322-E were made by publication in the Commission's Daily Calendar. Pacific Gas and Electric states that copies of the Advice Letter was mailed and distributed in accordance with Section IV of General Order 96-B.

## **PROTESTS**

PG&E's AL 3322-E was timely protested on September 10, 2008 by DRA. DRA recommends that the Commission reject PG&E's AL 3322-E without prejudice for the following reasons:

1. The Klondike PPA violates the RPS law by seeking to modify non-modifiable contract terms and conditions;
2. The agreement is a costly transaction for delivery of redundant unspecified power (e.g., coal-fired and natural gas-fired generation) to California at off-peak hours;
3. PPAs firming and shaping arrangement represents additional GHG liability in the face of future California Emission Performance Standards (EPS) rulings;
4. This type of transaction has been de-valued by the recent Commission Decision on the Definition of a REC (Decision 08-08-028)

On July 28, 2008 PG&E responded to the protest from DRA. In response, PG&E argues that DRA's protests are speculative in nature or based on misconstrued facts and accordingly should be denied.

## **DISCUSSION**

### **Description of the project**

The following table summarizes the substantive features of the PPA. See confidential Appendix B for a discussion of the PPA's terms and conditions, including price.

<b>Project</b>	<b>Resource Type</b>	<b>Term</b>	<b>Total Capacity (MW)</b>	<b>Annual Deliveries (GWh)</b>	<b>Online Date</b>	<b>Project Location</b>
Klondike IIIa	Wind	10 years	90 MW	Year 1-5: • 263 GWh Year 6-10: • Min 131 GWh • Max 263 GWh	12/31/2008	Sherman County, Oregon

Through its proposed PPA with Klondike IIIa, PG&E will procure generation from the project throughout the 10-year contract term. Klondike IIIa represents a 76.5 MW expansion of the Klondike wind facility in Sherman County, Oregon.

The PPA also includes an additional 13.5 MW of incremental generation from the Klondike wind facility, for a total of 90 MW. The new capacity is nearly completed and deliveries are expected to commence by the end of 2008.

PG&E executed a firming and shaping agreement with BPA (Exchange Agreement) to ensure the intermittent generation is delivered to PG&E at the California-Oregon Border (COB) in a manner consistent with RPS delivery requirements. See Appendix A for a schematic diagram of PPA's delivery structure. The Agreements also provide BPA the option to purchase 50 percent of the generation from the last five years of the ten-year contract term. If BPA exercises its option, it will execute its own PPA with Klondike and PG&E's procurement in years 6-10, pursuant to its PPA, will be reduced by 50 percent.

**Energy Division has reviewed the proposed PPA based upon multiple grounds:**

- Consistency with PG&E's 2007 RPS procurement plan
- Consistency with RPS bilateral guidelines
- Consistency with RPS Standard Terms and Conditions (STC)
- Reasonableness of the levelized all-in PPA price
- Compliance with the Interim Emissions Performance Standard (EPS)
- Consideration of DRA's protest
- Project viability

**PPA is consistent with PG&E's CPUC adopted 2007 RPS Plan**

California's RPS statute requires that the Commission review the results of a renewable energy resource solicitation submitted for approval by a utility.<sup>30</sup> PG&E's 2007 RPS procurement plan (Plan) was approved by D.07-02-011 on February 15, 2007.<sup>31</sup> 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 flexible compliance mechanisms established by the Commission, and a bid solicitation protocol setting forth the need for renewable generation of various operational characteristics.<sup>32</sup>

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<sup>30</sup> Pub. Util. Code, Section §399.14

<sup>31</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/78817.pdf](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/78817.pdf)

<sup>32</sup> Pub. Util. Code, Section §399.14(a)(3)

The stated goals of PG&E's 2007 Plan was to procure approximately 1-2 percent of retail sales volume or between 750 and 1,500 GWh per year. The PPA is consistent with PG&E's goal of procuring energy from projects with deliveries expected to contribute towards 20% renewables in 2010. If approved, the 90 MW of wind generation is expected to deliver, prior to 2010, approximately 3 percent of PG&E's 2009 incremental procurement target.<sup>33</sup>

### **PPA is consistent with RPS bilateral contracting guidelines**

The proposed PPA is consistent with Commission decisions regarding RPS bilateral contracts, as identified above. In this case, the all-in price of the contract is below the 2007 MPR, and therefore, is *per se* reasonable and does not require above-market funds. Second, the project is viable and expected to contribute to the State's RPS goal of 20% renewables in 2010.

We do not mean to suggest by approval of this bilaterally negotiated PPA that our preference for contracts resulting from an RPS solicitation is diminished. The solicitation process is the strongly preferred method for acquiring RPS contracts. In addition, the Commission intends to include more explicit standards and criteria for the reasonableness of RPS bilateral contracts in a decision in the near future. Until such decision is approved, the Commission will continue to consider the approval of RPS bilateral contracts on a case-by-case basis.

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

The proposed PPA conforms to the Commission's decisions requiring STCs for RPS contracts.

#### "May Not be Modified" Terms

The PPA does not deviate from the non-modifiable terms and conditions.

#### "May be Modified" Terms

During the course of negotiations, the parties identified a need to modify some of the modifiable standard terms in order to reach agreement. These terms had all been designated as subject to modification upon request of the bidder in Appendix A of D.08-04-009.

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<sup>33</sup> PG&E's Renewables Portfolio Compliance Report, filed August 15, 2008.

### **PPA Price is Reasonable**

The all-in levelized cost of the PPA is below the 2007 MPR and *per se* reasonable pursuant to statute. Additionally, the contract price is reasonable when compared to other RPS bids in PG&E's 2007 and 2008 RPS solicitations. Confidential Appendix B includes a detailed discussion of the pricing terms for the PPA and Exchange Agreement.

### **PPA complies with the Interim EPS**

Pursuant to SB 1368, D.07-01-039 adopted an interim Greenhouse Gas Emissions Performance Standard (EPS) for new long-term financial commitments by all LSEs. D.07-01-039 defined the conditions under which long-term baseload contracts for renewable energy, that are shaped and firmed energy with non-renewable energy sources, may be deemed EPS-compliant. For specified contracts with intermittent renewable resource, such as Klondike IIIa, "the amount of substitute energy purchases from unspecified resources is limited such that total purchases under the contract (whether from the intermittent renewable resource or from substitute unspecified sources) do not exceed the total expected output of the specified renewable powerplant over the term of the contract".<sup>34</sup>

The Decision also states the Commission's expectations for an LSE to demonstrate compliance with the EPS and the condition stated above. Specifically, D.07-0-039 states:<sup>35</sup>

The burden is on the LSE to provide sufficient documentation in compliance submittals to demonstrate that the above requirements are met. In particular, the LSE is required to make available to Commission staff the source data and methodology it uses in developing the level of expected output from renewable resources under contracts with a term of five years or longer that permit substitute energy purchases from unspecified resources, in order to demonstrate that the limits for substitute energy purchases for both intermittent and dispatchable renewable resources were properly established under the substitute energy provisions.

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<sup>34</sup> See D.07-01-039, COL #40

<sup>35</sup> See D.07-01-039, page 151

To verify the expected output from the facility, Klondike IIIa provided PG&E with meteorological data (met data) recorded from meteorological towers around the Klondike III project. Meteorological towers record the information required to forecast a wind resource area's generation potential, such as, wind speed, wind direction, air temperature and barometric pressure.<sup>36</sup> Staff reviewed Klondike IIIa's hourly generation forecast submitted with AL 3322-E and also calculated the approximate capacity factor based on the MW capacity and estimated annual deliveries, and finds the projection reasonable. Specifically, we believe that it is reasonable to expect that additional capacity in this proven wind resource area to operate at an average capacity factor of approximately 30 percent.<sup>37</sup>

The Exchange Agreement includes terms and conditions to prevent BPA from delivering a greater quantity of system energy than is expected to be generated by the project. Moreover, PG&E may only count deliveries towards its RPS obligation up to the amount of generation at Klondike IIIa.

### **DRA's protest is denied**

On October 10, 2008 DRA filed a protest against PG&E's AL 3322-E on several grounds, PG&E responded on October 17, 2008. We considered all issues raised by DRA, and determine that DRA's protest should be denied in its entirety. We discuss the issues individually here.

### Standard Terms and Conditions

DRA argues that AL 3322-E should be rejected because the PPA fails to comply with the Commission's STCs. Moreover, DRA claims that PG&E attempted to conceal that its PPA includes changes to STCs that the Commission deemed "non-modifiable".

PG&E asserts that its PPA with Klondike IIIa fully complies with the Commission's STCs for RPS contracts and that PG&E fully disclosed in AL 3322-E how they incorporated STCs in its PPA with Klondike IIIa and its Exchange Agreement with BPA. In its response to DRA's protest, PG&E argues that the

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<sup>36</sup> <http://www.caiso.com/1bad/1bade8443eb80.pdf>

<sup>37</sup> A 2004 Black&Veatch study reported California's average installed wind capacity factor to be 26.6 percent. [http://www.regie-energie.qc.ca/audiences/3526-04/MemoiresParticip3526/Memoire\\_CCVK\\_33\\_BV\\_int\\_renew2.pdf](http://www.regie-energie.qc.ca/audiences/3526-04/MemoiresParticip3526/Memoire_CCVK_33_BV_int_renew2.pdf)

Commission's STCs are required for RPS PPAs but were not contemplated and are not required for firming and shaping agreements.

We find that PG&E's PPA with Klondike IIIa, the renewable energy contract which is the subject of AL 3322-E, includes the Commission's required non-modifiable STCs. We agree with PG&E that, "The RPS legislation and Decision (D.) 07-11-025 do not require the Commission's RPS STC to be included in the firming, shaping and delivery agreements that accompany contracts for the purchase of renewable energy." (PG&E Response, p.2). Accordingly, we deny DRA's protest. Because AL 3322-E includes a detailed discussion about how the PPA and the Exchange Agreement treat STCs, we reject DRA's claim that PG&E concealed this information from the Commission and other stakeholders.

#### Price reasonableness and need

DRA characterizes the PPA as costly and void of any benefits to California ratepayers. Specifically, DRA argues that pursuant to the PPA, PG&E will be required to accept power "at a time when California ratepayers have access to more power than they need," and DRA asserts that the costs of the contract "would likely exceed the MPR when all future conditions are met." (See DRA Protest, p. 4).

PG&E argues that deliveries pursuant to the Klondike IIIa PPA and the associated Exchange Agreement were evaluated according to PG&E's Commission approved Least-Cost Best-Fit (LCBF) methodology. Specifically, PG&E contends that "PG&E recognized the value of the import energy when it is delivered and where it is delivered," and determined through its economic assessment that the combined cost of the PPA and the Exchange Agreement is highly competitive. PG&E also argues that the all-in costs are less than the 2007 MPR and that the contract represents a good value to its customers relative to other RPS contracts.

We find that PG&E has demonstrated that the Agreements are reasonably priced and moreover that the all-in costs are below the 2007 MPR. DRA's vague reference to "future conditions" does not provide any information on which we could decide that contract costs are not reasonable. Furthermore, DRA's protest does not support its assertion that deliveries pursuant to the Agreements will not meet PG&E's need. DRA's protest is denied.

GHG liability

DRA argues that AL 3322-E should be rejected because the Commission's interim EPS decision did not address the issue of "'assigned emission rate' for substitute unspecified power used for firming and shaping." (See DRA Protest, p. 5). DRA asserts that future GHG regulation may address this issue in a manner that would "increase the state's GHG liability."

PG&E replies that if DRA's protest was accepted, "DRA would have the Commission reject a contract that satisfies all identifiable regulatory standards based upon its unsupported assertion that EPS standards may change in the future". PG&E argues that regulatory speculation provides no basis for rejecting its AL 3322-E. (See PG&E Response, p. 5.).

DRA's protest is denied. We considered DRA's protest based on the clear language of D.07-01-039:<sup>38</sup>

Therefore, instead of imputing an emissions rate to unspecified contracts, we require in today's decision that all covered procurements be with specified resources that can demonstrate compliance with the interim EPS, except when substitute system energy is purchased to firm deliveries from specified powerplants under the limited conditions we describe below. For the reasons discussed in this decision, we conclude that addressing unspecified contracts in this manner is consistent with the rest of the statute, as SB 1368 requires. [Footnote omitted]

Renewable energy contracts are deemed EPS compliant except in cases where intermittent renewable energy is shaped and firmed with generation from non-renewable resources. If the renewable energy contract is shaped and firmed with a specified energy source that is considered baseload generation, then the energy source must individually meet the EPS. If, however, the intermittent energy is firmed and shaped with an unspecified energy source (e.g. system power), then D.07-01-039 specifically defines the following eligibility condition:<sup>39</sup>

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<sup>38</sup> See D.07-01-039, p. 13.

<sup>39</sup> D.07-01-039, Conclusion of Law 40. Note: These compliance rules specifically apply to IOUs, additional compliance rules may apply to other RPS-obligated load serving entities.

For specified contracts with intermittent renewable resources (defined as solar, wind and run-of-river hydroelectricity), the amount of substitute energy purchases from unspecified resources is limited such that total purchases under the contract (whether from the intermittent renewable resource or from substitute unspecified sources) do not exceed the total expected output of the specified renewable powerplant over the term of the contract.

We find that the EPS decision refutes DRA's protest and that PG&E's contract meets the EPS standards in effect today. Specifically, the Exchange Agreement provides that PG&E will receive deliveries of non-unit specific system power at a level not to exceed the output of Klondike IIIa. The remainder of DRA's protest on this issue is based on speculation of future GHG regulation and will not be considered by resolution.

#### REC definition

Lastly, DRA protests AL 3322-E based on its interpretation of this Commission's recent decision on the definition of a renewable energy credit (REC).<sup>40</sup> DRA asserts that the "transaction will not further California GHG reduction goals" because a REC from an out-of-state facility "has no GHG value." Similar to its protest related to the EPS, DRA's protest is based on speculation of future GHG regulation. In its protest, DRA speculates that the substitute energy PG&E receives pursuant to the Exchange Agreement with BPA may require GHG allowances. (See DRA Protest, p. 6).

PG&E claims that DRA's protest lacks foundation and is premature. Moreover, PG&E contends that "the REC decision has no bearing on the GHG risk profile of the Klondike PPA." (See PG&E Response, p. 6).

The California Air Resources Board (ARB), not this Commission, is responsible for implementing the state's GHG emissions reduction policy and for determining which entities will need GHG allowances. D.08-08-028 clearly made no determination about the value of RECs from in-state or out-of-state facilities for compliance with AB 32. The decision defines which attributes a REC includes (regardless of the location of the generating unit). The decision says that a REC

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<sup>40</sup> D.08-08-028, Decision on Definition and Attributes of Renewable Energy Credits for Compliance with the California Renewables Portfolio Standard  
[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/86954.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/86954.PDF)

includes “all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource, including any... avoided emissions of carbon dioxide...” The decision states that once a REC is used for compliance with the RPS program it should not also be allowed to be used as an offset.<sup>41</sup> D.08-08-028 also defers to ARB all decisions on AB 32 implementation and states that a REC’s “avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the definition of the REC, this definition does not create any right to use those avoided emissions to comply with any GHG regulatory program.”<sup>42</sup>

Because ARB has not yet addressed the issue raised by DRA, DRA’s objection is speculative. At this time, there is no reason to believe that the firming and shaping arrangement for this contract will or will not require surrender of GHG allowances in the future. DRA fails to provide any fact or rule of law to substantiate their protest. Accordingly, DRA’s protest is denied.

### **Klondike IIIa is a viable project**

PG&E believes the project is viable because:

#### Project Milestones

The PPA identifies the agreed upon commercial operation date as a guaranteed project milestones. Klondike IIIa notified PG&E that it has met all its project milestones, including permitting, and expects to achieve commercial operation prior to the guaranteed commercial operation date.

#### Financeability of resource

Klondike IIIa has received all necessary financing to develop its project, which is expected to become fully operational on or before the guaranteed commercial operation date.

#### Seller’s creditworthiness and experience

Klondike IIIa’s parent company, Iberdrola Renewables, Inc has successfully developed wind energy projects throughout the United States and currently operates over 8,000 MW of wind energy capacity worldwide.<sup>43</sup>

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<sup>41</sup> *Ibid*, p. 22

<sup>42</sup> *Ibid*, p.45, footnote 77.

<sup>43</sup> Iberdrola Renewables, Inc <http://www.ppmenergy.com/cs.html>

### Technology and Fuel Supply

Wind is a proven resource and Sherman County, Oregon, which is located in the Columbia Plateau Regions, is a known wind resource area.<sup>44</sup> Klondike IIIa has completed all resource studies and is completing the construction of its facility. Turbines have been purchased and are in the process of being installed.

### Production Tax Credit (PTC)

Klondike IIIa is eligible for the federal PTC. On October 3, 2008, President Bush signed the Emergency Economic Stabilization Act of 2008, House Resolution (H.R.) 1424 (2008), which in part extended the PTC for wind energy projects.<sup>45</sup>

### Transmission

No new transmission facilities or network upgrades are required for PG&E to accept deliveries under the PPA.

## 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 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 November 18, 2008.

No comments were filed.

## FINDINGS

1. PG&E filed Advice Letter (AL) 3322-E on August 21, 2008 requesting Commission review and approval of a renewable energy resource power purchase agreement (PPA) with Klondike III Wind Power Project, LLC and an Exchange Agreement with Bonneville Power Authority (BPA).

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<sup>44</sup> [http://www.oregon.gov/ENERGY/SITING/docs/Wind\\_Projects80304.pdf](http://www.oregon.gov/ENERGY/SITING/docs/Wind_Projects80304.pdf)

<sup>45</sup> <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:H.R.1424>: (Last visited November 12, 2008)

2. The RPS Program requires each utility, including PG&E, to increase the amount of renewable energy in its portfolio to 20 percent by 2010, increasing by a minimum of one percent per year.
3. The Commission requires each utility to establish a Procurement Review Group (PRG) to review the utilities' interim procurement needs and strategy, proposed procurement process, and selected contracts.
4. D.04-06-014 and D.07-11-025 set forth standard terms and conditions to be incorporated into each RPS PPA. Those terms were compiled and published by D.08-04-009.
5. The PPA includes the Commission adopted RPS Standard Terms and Conditions deemed "non-modifiable".
6. D.07-01-039 adopted an interim Greenhouse Gas Emissions Performance Standard (EPS) for contracts greater than 5 years in length and included compliance guidelines for when renewable intermittent generation is firmed with energy from unspecified resources.
7. PG&E's PPA complies with the Commission's emissions performance standard adopted in D.07-01-039.
8. DRA protested AL 3322-E on September 10, 2008 and PG&E responded on September 17, 2008.
9. DRA's protest is denied in its entirety.
10. 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 Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.) ("RPS"), Decision ("D.") 03-06-071 and D.06-10-050, or other applicable law.
11. The payments made under 1) the PPA between PG&E and Klondike III Wind Power Project, LLC and 2) the Exchange Agreement between PG&E and Bonneville Power Authority are reasonable and in the public interest; accordingly, the payments to be made by PG&E are fully recoverable in rates over the life of the project, subject to CPUC review of PG&E's administration of the PPA.
12. Certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should not be disclosed. Accordingly, the confidential appendices,

marked "[REDACTED]" in the redacted copy, should not be made public upon Commission approval of this resolution.

13. The PPA is reasonable and should be approved.
14. The payments made under the PPA and the Exchange Agreement, including all renewable procurement and administrative costs identified in Section 399.14(g) shall be recovered in rates.
15. Any stranded costs that may arise from the PPA are subject to the provisions of D.08-09-012 that authorize recovery of stranded renewable procurement costs over the life of the contract.
16. AL 3322-E should be approved effective today.

**THEREFORE IT IS ORDERED:**

1. AL 3322-E is approved without modification.
2. The payments made under 1) the PPA between PG&E and Klondike III Wind Power Project, LLC and 2) the Exchange Agreement between PG&E and Bonneville Power Authority are reasonable and in the public interest, accordingly, the payments to be made by PG&E are fully recoverable in rates over the life of the project, subject to CPUC review of PG&E's administration of the PPA.
3. 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 on December 18, 2008; the following Commissioners voting favorably thereon:

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PAUL CLANON  
Executive Director

## **Appendix A**

# CEC Pre-Certification of Out-of-State Delivery

**CALIFORNIA ENERGY COMMISSION**

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512  
www.energy.ca.gov



November 13, 2008

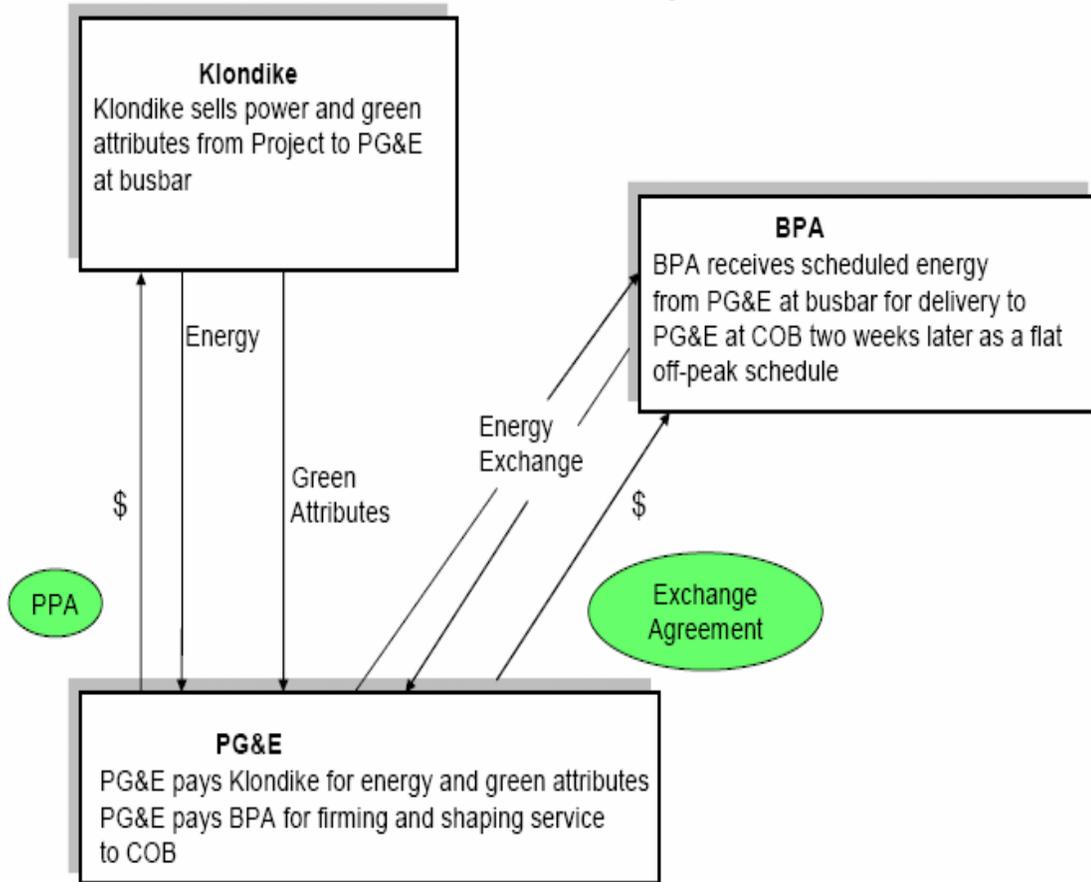
The California Energy Commission, through its staff, has reviewed the proposed contracting structure between Klondike Wind Power III and PG&E, as identified in Advice Letter #3322-E and shown in the attached schematic design titled, 'Klondike-BPA Delivery Structure' (page 4 of AL-3322-E), dated August 21, 2008.

The Energy Commission staff has determined that this structure would meet the RPS delivery requirements according to the *Renewables Portfolio Standard Eligibility Guidebook* (CEC-300-2007-006-ED3-CMF, January 2008).

Mark Hutchison  
Manager, Renewable Energy Office  
California Energy Commission

Attachment

## Klondike-BPA Delivery Structure



# **Confidential Appendix B**

## **Contract Summary [REDACTED]**

## **Confidential Appendix C**

### **PPA's Contribution Toward RPS Goals [REDACTED]**

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