#### DRAFT

#### PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

ID #10831 RESOLUTION E-4447 December 15, 2011

#### **REDACTED**

#### RESOLUTION

Resolution E-4447. Pacific Gas and Electric Company requests approval of a renewable energy power purchase agreement with Copper Mountain 2, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for the long-term renewable energy power purchase agreement between Pacific Gas and Electric Company and Copper Mountain 2, LLC. The power purchase agreement is approved without modification.

ESTIMATED COST: Costs of the power purchase agreement are confidential at this time.

By Advice Letter 3884-E filed on August 4, 2011.

#### **SUMMARY**

#### Pacific Gas and Electric Company's renewable energy power purchase agreement with Copper Mountain 2, LLC complies with the Renewables Portfolio Standard procurement guidelines and is approved without modification.

Pacific Gas and Electric Company (PG&E) filed Advice Letter 3884-E on August 4, 2011, requesting the California Public Utilities Commission (Commission) approve a 25-year renewable energy power purchase agreement between PG&E and Copper Mountain 2, LLC, a subsidiary of Sempra Generation. The bilaterally negotiated power purchase agreement is for generation from a new 150 megawatt (MW) solar photovoltaic facility being developed in the El Dorado Valley Energy Development Area, near Boulder City, Nevada. The facility is expected to achieve commercial operation by the end of 2012.

The power purchase agreement (PPA) requires that the first point of interconnection will either be directly to the California Independent System

Operator (CAISO) grid, or the Project will be dynamically scheduled into the CAISO. The Project's first 92 MW is expected to achieve commercial operation by December 31, 2012, and the remaining 58 MW by July 15, 2015.

This resolution approves the Copper Mountain 2, LLC power purchase agreement without modifications. If PG&E exercises its option to have Copper Mountain 2, LLC develop the project in an expedited manner, PG&E must first consult with its Procurement Review Group and shall file a Tier 2 Advice Letter notifying the Commission of PG&E's intent to exercise the option and to demonstrate that exercising the option is necessary for PG&E to meet its Renewables Portfolio Standard compliance obligations. PG&E's execution of this power purchase agreement is consistent with PG&E's RPS Procurement Plan, including its resource need, which the Commission approved in Decision 11-04-030. Deliveries under the Copper Mountain 2, LLC power purchase agreement are reasonably priced and 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.

The following table provides a summary of the Copper Mountain 2, LLC power purchase agreement:

Generating	Technolog	Term	Capacity	Energy	Online	Location
Facilities	y Type	(Years)	(MW)	(GWh/year)	Date	
Copper Mountain Solar 2	Solar PV	25	150	303	92MW: 12/2012 7/2015 for full 150 MW	Boulder City, NV

#### BACKGROUND

#### **Overview of the Renewables Portfolio Standard (RPS) 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 Public Utilities Code Sections 399.11-399.20.<sup>2</sup> Under SB 2

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

(1X),<sup>3</sup> the RPS program administered by the Commission requires each retail seller to increase its total procurement of eligible renewable energy resources so that the amount of electricity generated per year from eligible renewable resources be increased to an amount that equals an average of 20% of the total electricity sold to retail customers in California for the period 2011-2013; 25% of retail sales by December 31, 2016; and 33% of retail sales by December 31, 2020. <sup>4</sup>

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

#### NOTICE

Notice of Advice Letter 3884-E was made by publication in the Commission's Daily Calendar. PG&E states that copies of the Advice Letters were mailed and distributed in accordance with Section IV of General Order 96-B.

#### PROTESTS

PG&E Advice Letter 3884-E was not protested.

#### DISCUSSION

#### Pacific Gas and Electric Company requests approval of a renewable energy power purchase agreement with Copper Mountain 2, LLC (a Subsidiary of Sempra Generation).

On August 4, 2011, Pacific Gas and Electric Company (PG&E) filed Advice Letter (AL) 3884-E requesting the California Public Utilities Commission (Commission) approve a long-term power purchase agreement (PPA) with Copper Mountain 2, LLC (Copper Mountain 2 or Project). Generation from the 150 MW Project is expected to contribute an average of 303 gigawatt-hours (GWh) annually towards PG&E's annual procurement target, pursuant to the Commission's renewables portfolio standard (RPS) program. Under the terms of the bilaterally negotiated purchase power agreement, the first 92 MW of the project will be online December 31, 2012, and the full 150 MW of capacity to be online by July

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<sup>&</sup>lt;sup>3</sup> SB 2 (1X) becomes effective on December 10, 2011; 90 days after the close of the Legislatures 2011 Extraordinary Session.

<sup>&</sup>lt;sup>4</sup> See SB 2 (1X) § 399.15(b)(2)(B).

15, 2015. PG&E has an option to accelerate the development of the Project so that the full capacity can be online 36 months after the effective date of the PPA. This option is intended to provide PG&E with some enhanced flexibility to manage its RPS compliance strategy. For example, if it appears likely that the utility will fail to procure sufficient RPS-eligible energy in the 2014-2016 compliance period to meet its goals, PG&E could exercise this option to increase the total MWh purchased from Copper Mountain 2 in that period by accelerating the point in time at which contract capacity increases from 92 to 150 MW. This does change the cost of the contract.

The Commission approves this contract provision with the condition that before exercising this option, PG&E must first consult with its Procurement Review Group and if PG&E elects to exercise the option, PG&E must file a Tier 2 Advice Letter clearly demonstrating that PG&E is not on track to meet RPS compliance obligations for the 2014-2016 compliance period and to inform the Commission that PG&E has exercised the option.

On July 26, 2011, PG&E executed the PPA with Sempra Generation (Sempra) for the Copper Mountain 2 Project. The project is located in Boulder City, Nevada, a known solar resource area and is using a commercially-proven solar photovoltaic technology. Sempra, the parent company is a viable counterparty that has developed and delivered renewable energy to PG&E from two solar photovoltaic facilities from nearby El Dorado<sup>5</sup> and Copper Mountain<sup>6</sup> photovoltaic (PV) power plants.

The PPA requires that the Project's first point of interconnection will either be directly to the CAISO grid, or generation from the Project will be dynamically scheduled into the CAISO. See Confidential Appendix A for a discussion on the various interconnection options that Copper Mountain Solar 2 is considering.

The facilities are expected to achieve commercial operation in 2012; thus, generation from the facility would count towards PG&E's RPS requirements in the first compliance period, 2011-2013.<sup>7</sup> The Commission's approval of the PPA will authorize PG&E to accept future RPS-eligible generation that will contribute towards PG&E's 33 percent RPS target

<sup>&</sup>lt;sup>5</sup> See Resolution E-4240

<sup>&</sup>lt;sup>6</sup> See Resolution E-4302

<sup>&</sup>lt;sup>7</sup> In addition to raising California's RPS requirement to 33% from 20%, SB 2 (1X) (Stats. 2011 (Simitian)) establishes three different compliance periods, 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 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 CPUC Approval:
  - a. The PPA is consistent with PG&E's 2009 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 ("ERRA").
  - 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 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 covered procurement subject to the EPS because the generating facility has a forecast 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.

# Energy Division Evaluated the Copper Mountain 2 PPA on the following criteria:

- Consistency with bilateral contracting rules
- Consistency with PG&E's RPS 2011 Procurement Plan
- Consistency with PG&E's Least-Cost, Best-Fit requirements
- Consistency with RPS standard terms and conditions
- Independent Evaluator review
- Procurement Classification
- Cost reasonableness
- Cost containment
- Assessment of PG&E's need for the Copper Mountain 2 project
- Project viability assessment and development status
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard
- Procurement Review Group participation
- Contribution to minimum quantity requirement for long-term/new facility contracts

#### **Consistency with Bilateral Contracting Rules**

According to PG&E, the PPA was negotiated on a bilateral basis because the offer was at a competitive price with acceptable terms and conditions and because there was a high probability that, if the offer had been deferred to PG&E's 2011 RPS solicitation, the Project's near term online date could have been significantly delayed. PG&E asserts that by negotiating this transaction on a bilateral basis, rather than through the 2011 RPS Solicitation, PG&E will be able to secure deliveries of RPS-eligible power from the PPA beginning in late 2012 to increase its RPS compliance position for the first compliance period, 2011-2013.

In AL 3884-E, PG&E provided a comparison of the Copper Mountain 2 PPA to the offers that PG&E received in its 2009 RPS solicitation because at the time PG&E filed the Copper Mountain 2 PPA for Commission approval, PG&E had not completed its evaluation of offers received in its 2011 RPS solicitation. PG&E concluded that the PPA is reasonably priced and viable.

In D.06-10-019, the Commission established rules pursuant to which the IOUs could enter into bilateral RPS contracts. PG&E adhered to these bilateral contracting rules: the PPA is longer than one month in duration, the PPA was filed by advice letter, the above market costs will not be applied to PG&E's RPS cost limitation, and the contracts are reasonably priced, as discussed in more detail below.

In D.09-06-050, this Commission determined that bilateral agreements should be reviewed according to the same processes and standards as projects that come through a solicitation. Accordingly, as described below, the Copper Mountain 2 PPA was compared to the 2011 RPS solicitation preliminary shortlist and other recently executed agreements. The proposed agreement was reviewed by PG&E's Procurement Review Group; and an independent evaluator oversaw the project evaluation and PPA negotiation.

<u>The Copper Mountain 2 PPA is consistent with the bilateral contracting</u> <u>guidelines established in D.06-10-019 and D.09-06-050.</u>

#### Consistency with PG&E's RPS 2011 Procurement Plan

Pursuant to statute, PG&E's RPS 2011 Procurement Plan (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>8</sup> California's RPS statute also requires that the Commission review the results of a renewable energy resource solicitation submitted for approval by a utility.<sup>9</sup> The Commission reviews the results to verify that the utility conducted its solicitation according to its Commission-approved procurement plan.<sup>10</sup>

In PG&E's Commission-approved 2011 RPS Plan, PG&E solicited renewable energy contracts equivalent to at least 1 to 2 percent of retail sales annually. This goal is intended to address both the near-term 20 percent compliance mandate established in SB2 (1X) and the longer-term 33 percent state mandate by balancing near-term compliance needs and longer-term portfolio expansion and maintenance. PG&E is pursuing both short- and long-term contracts to meet

<sup>&</sup>lt;sup>8</sup> Pub. Util. Code, Section §399.14(a)(3).

<sup>&</sup>lt;sup>9</sup> Pub. Util. Code, Section §399.14.

<sup>&</sup>lt;sup>10</sup> PG&E's 2011 RPS Procurement Plan was approved by D.11-04-030 on April 14, 2011.

these statutory goals. With expected RPS-eligible energy deliveries, on average, of approximately 303 GWh per year for a term of 25-years, the PPA meets the criteria for renewables procurement contained in the RPS Procurement Plan to meet PG&E's near and long term RPS goals.

<u>The Copper Mountain 2 PPA is consistent with PG&E's 2011 RPS Procurement</u> <u>Plan, as approved by D.11-04-030.</u>

#### Consistency with PG&E's least-cost best-fit (LCBF) methodology

In D.04-07-029, the Commission directs the utilities to use certain criteria in their LCBF selection of renewable resources.<sup>11</sup> The decision 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. As described in its RPS Procurement Plan, PG&E's LCBF bid evaluation includes a quantitative analysis and qualitative criteria. PG&E's quantitative analysis or market valuation includes evaluation of price, time of delivery factors, transmission costs, congestion costs, and resource adequacy. PG&E's qualitative analysis focuses on comparing similar bids across numerous factors, such as location, benefits to minority and low income areas, and resource diversity.

PG&E negotiated the Copper Mountain 2 PPA bilaterally and therefore it did not compete directly with other RPS projects. In AL 3884-E, PG&E explains that it evaluated the bilateral agreement using the same LCBF evaluation methodology it employs for evaluating bids from solicitations. Thus, PG&E used its LCBF methodology to evaluate the Copper Mountain 2 PPA. See the "Cost Reasonableness" section of this Resolution for a discussion of how the Project compares to PG&E's 2009 RPS solicitation and recently executed contracts. In addition, see Confidential Appendix A for PG&E's LCBF evaluation of the project.

The Copper Mountain 2 PPA was evaluated consistent with the LCBF methodology identified in PG&E's RPS Procurement Plan.

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

The Commission adopted a set of standard terms and conditions (STCs) required in RPS contracts, four 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 in D.10-03-021, as modified by D.11-01-025, the Commission further refined these STCs.

<sup>&</sup>lt;sup>11</sup> See §399.14(a)(2)(B)

The Copper Mountain 2 PPA includes the Commission adopted RPS "nonmodifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

#### Independent Evaluator Review

PG&E retained independent evaluator (IE) Lewis Hashimoto from Arroyo Seco Consulting to oversee PG&E's bilateral negotiations with Copper Mountain 2 and to evaluate the overall merits for CPUC approval of the PPA. AL 3884-E included a public and confidential independent evaluator's report.<sup>12</sup> The IE in its report determined that negotiations between parties were conducted fairly. The IE considers the project's viability to be high, the contract price, net value, and portfolio fit as reasonable. The IE concludes that the contract merits CPUC approval, with certain reservations about the PPA. Please see Confidential Appendix B attached for the IE's report.

Consistent with D.06-05-039 and D.09-06-050, an independent evaluator oversaw PG&E's negotiations with Copper Mountain 2.

#### **Procurement Classification**

In D.10-03-021, as modified by D.11-01-025, the Commission established rules pursuant to which tradable renewable energy credits (TRECS) can be used for RPS compliance. In this decision, the Commission determined that transactions should be considered "bundled" procurement for RPS compliance purposes for the following two delivery options: (1) RECs and energy that are procured from RPS-eligible generators for which the first point of interconnection with the Western Electricity Coordinating Council (WECC) interconnected transmission system is in a California balancing authority area, or (2) transactions using dynamic transfer arrangements with a California balancing authority.

In addition to establishing a 33% RPS by 2020 requirement, SB 2 (1X) establishes three portfolio content categories for RPS procurement and compliance purposes.<sup>13</sup> The new RPS law includes projects that "have a first point of interconnection with a California balancing authority" and projects that "have an agreement to dynamically transfer electricity to a California balancing authority" in the same portfolio content category. The Commission is in the process of implementing SB 2 (1X), which has an effective date of December 10,

<sup>12</sup>AL 3884-E included an IE report concerning the negotiation of the Copper Mountain 2 PPA and the value of the contract based on a price comparison with other renewable energy projects, portfolio fit, project viability, and compliance with PG&E's RPS goals.

<sup>13</sup> See SB 2 (1X), § 399.16(b)

**2011**.<sup>14</sup>

PG&E states that the Project will interconnect to the CAISO controlled transmission system, or will be dynamically transferred to the CAISO via a pseudo-tie. Copper Mountain 2 is pursuing several options to ensure that generation from its facility will be located in the CAISO Balancing Authority Area, will be treated as a bundled procurement for RPS compliance purposes pursuant to D.10-03-021, as modified by D.11-01-025, or within the first portfolio content category, pursuant to SB 2 (1X). However, at this time, if Copper Mountain 2 selects an option that requires energy to be dynamically transferred to the CAISO, then the Project will need a finalized Participating Generator Agreement with the CAISO. A Participating Generator Agreement is an agreement between the generator and the CAISO that allows the generator to schedule and deliver energy as it is generated to the CAISO as an "in-area" resource. Since the Copper Mountain 2 facility is not directly interconnected to a California Balancing Authority and has not yet obtained a Participating Generator Agreement with the CAISO, the Commission cannot make a determination that this is a bundled contract or that it qualifies for the first portfolio content category established by SB 2 (1X).

#### **Cost Reasonableness**

The Commission's reasonableness review for RPS PPA prices includes a comparison of the proposed PPA price to other RPS offers received in recent RPS solicitations, and recently executed contracts. At the time that the IE reviewed the PPA, PG&E was still processing the bids from its 2011 RPS solicitation, so the IE only reviewed the PPA against the PG&E 2009 solicitation.<sup>15</sup> The IE determined that the price is reasonable when reviewed against the 2009 solicitation. Energy Division, also compared the PPA against PG&E's 2011 RPS solicitation preliminary shortlist because it is the most recent market data available.<sup>16</sup> Using this analysis and the confidential analysis provided by PG&E in AL 3884-E, the Commission determines that the cost of the Copper Mountain 2 PPA is reasonable.

<sup>&</sup>lt;sup>14</sup> The Commission opened Rulemaking (R.) 11-05-005 to implement the new 33% RPS law, SB 2 (1X). A proposed decision addressing § 399.16 was issued on October 7, 2011.

<sup>&</sup>lt;sup>15</sup> See Appendix B for the IE's report and details specific to his analysis of Copper Mountain 2 PPA's net market value.

<sup>&</sup>lt;sup>16</sup> See Table 4 in Appendix A for the calculation of the PPA's net market value using PG&E's 2011 LCBF methodology.

The Copper Mountain 2 PPA reasonably compares to the results of PG&E's 2009 RPS solicitation and recently executed contracts.

Payments made by PG&E under the Copper Mountain 2 PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

#### **Cost Containment**

Pursuant to statute, the Commission calculates a market price referent (MPR) to assess whether a proposed PPA has above-market costs.<sup>17</sup> The MPR is used by the Commission to assess the above-market costs of RPS contracts. There is a statutory limit on above-MPR costs, which serves as a cost containment mechanism for the RPS program.<sup>18</sup> Contracts that meet certain criteria are eligible for above-MPR funds (AMFs).<sup>19</sup> Once an electrical corporation has exhausted its AMFs provided by statute, it is not required to procure RPS-eligible generation at above-MPR costs but may voluntarily choose to do so.<sup>20</sup>

Based on 2012 commercial online date for the Copper Mountain 2 facility, the 25year PPA is below the 2009 MPR and accordingly the PPA does not have abovemarket costs associated with it.

#### Assessment of PG&E's need for the Copper Mountain 2 project

Future RPS compliance obligations are generally defined in SB 2 (1x) as follows: PG&E must procure RPS-eligible resources equivalent to an average of 20 percent of retail sales for 2011-2013; 25 percent of retail sales by the end of 2016; and 33 percent of retail sales by 2020 and for each year thereafter. With this clarity over the near and longer-term RPS targets, the Commission's ability to assess PG&E's RPS procurement needs has improved.

<sup>18</sup> See Pub. Util. Code §399.15.

<sup>19</sup> Under Resolution E-4199, a PPA between a utility and a developer must meet the following requirements for the utility to achieve AMF eligibility: (1) the PPA must have Commission approval and be selected through a competitive solicitation, (2) it must cover a duration of at least 10 years; (3) it must develop a new or repowered facility commencing operations on or after January 1, 2005; (4) it must not be a purchase of renewable energy credits; and (5) it must not include any indirect expenses as set forth in the statute.

<sup>20</sup> See Pub. Util. Code § 399.15(d).

<sup>&</sup>lt;sup>17</sup> See Pub. Util. Code § 399.15(c).

To assess PG&E's need for the Copper Mountain 2 PPA, our analysis focused on the first compliance period since the initial online date is December 2012. The information provided in PG&E's August 2011 Compliance Report demonstrates that when applying a reasonably conservative forecast of the future,(i.e. applying a success rate of projects not yet under construction) PG&E has a need for the Project for the first compliance period.

PG&E has demonstrated that it has an incremental need for RPS-eligible generation in the first compliance period, 2011-2013 which the Copper Mountain 2 PPA will contribute to.

#### **Project Viability Assessment and Development Status**

PG&E asserts that the Copper Mountain 2 project is viable and will be developed according to the terms and conditions in the PPA. PG&E bases its assertion on its evaluation of the project's viability using the Commission-approved project viability calculator, which uses standardized criteria to quantify a project's strengths and weaknesses in key areas of renewable project development. Additionally, PG&E provided the following information about the project's development status.

#### Developer experience

Copper Mountain 2, LLC is a wholly owned subsidiary of Sempra Generation. Sempra owns and operates and operates power plants for wholesale electricity markets in North America. Its fleet of generation produces over 2,600 MW of electricity which is sold to utilities, power marketers, and large energy users.

The development team has successfully completed two solar PV projects, El Dorado and Copper Mountain, which are under contract and delivering renewable power to PG&E. The development team has also begun construction on the 150 MW Mesquite Solar PV project, also under contract to PG&E.

#### Resource quality

PG&E asserts that the Project is in a very high solar insolation region. This is supported by current deliveries from the Sempra El Dorado and Copper Mountain 1 solar PV projects. In addition, the Copper Mountain 2 has gathered its own solar insolation data to confirm the solar resource. The solar studies conducted for the Project support the contract capacity factor of 23.1%, producing approximately 303 GWh. The Boulder City energy zone where the Project is located is recognized in the solar industry as ideal for solar generation, having the potential for significant renewable energy production.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> AL 3884-E, p.14

#### Site control and permitting status

Sempra has site control for the project for the length of the PPA term..

#### Interconnection and transmission

Copper Mountain 2 is pursuing several options to ensure that generation from its facility, which is currently located outside the CAISO Balancing Authority Area. PG&E states in AL 3884-E that the Project will interconnect to the CAISO controlled transmission system, or will be dynamically transferred<sup>22</sup> to the CAISO via a pseudo-tie. The point of interconnection will be the first point of interconnection to the CAISO system.

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

California 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>23</sup>

D.07-01-039 adopted an interim Emissions Performance Standard (EPS) that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant. Generating facilities using certain renewable resources are deemed compliant with the EPS.<sup>24</sup>

<u>The Copper Mountain 2 PPA meets the conditions for EPS compliance because</u> <u>it is for intermittent generation with a capacity factor less than 60 percent.</u>

<sup>&</sup>lt;sup>22</sup> The CAISO defines dynamic transfers as a service that transfers "…all, or a portion of, actual output of a specific generator to another Balancing Authority in real-time". The CAISO is considering tariff changes to formally accommodate dynamic transfers. http://www.caiso.com/2476/24768d0a2efd0.html

<sup>&</sup>lt;sup>23</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>&</sup>lt;sup>24</sup> D.07-01-039, Attachment 7, p. 4

#### **Procurement Review Group Participation**

The Procurement Review Group (PRG) was initially established in D.02-08-071 as an advisory group to review and assess the details of the IOUs' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission.<sup>25</sup> PG&E asserts that the Copper Mountain 2 PPA was discussed at PRG meetings on October 8, 2010, December 10, 2010, March 8, 2011, May 17, 2011, and July 15, 2011.

### Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the Copper Mountain 2 PPA.

# Contribution to Minimum Quantity Requirement for Long-Term/New Facility Contracts

D.07-05-028 established a "minimum quantity" condition on the ability of utilities to count an eligible contract of less than 10 years duration for compliance with the RPS program.<sup>26</sup> In the calendar year that a short-term contract with an existing facility is executed, the utility must also enter into long-term contracts or contracts with new facilities equivalent to at least 0.25 percent of the utility's previous year's retail sales.

As a new facility, delivering pursuant to long-term contracts, the Copper Mountain 2 PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.

#### **RPS Eligibility and CPUC Approval**

Pursuant to Pub. Util. Code § 399.13, the 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 contract, the Commission has required standard and non-modifiable "eligibility" language in all RPS contracts. 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

<sup>25</sup> PG&E's PRG includes representatives of the Union of Concerned Scientists, the Coalition of California Utility Employees, The Utility Reform Network, the California Public Utility Commission's Energy Division and Division of Ratepayer Advocates, and the California Department of Water Resources.

<sup>26</sup> For purposes of D.07-05-028, contracts of less than 10 years duration are considered "short-term" contracts and facilities that commenced commercial operations prior to January 1, 2005 are considered "existing."

California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.<sup>27</sup>

The Commission requires a standard and non-modifiable clause in all RPS contracts that requires "CPUC Approval" of a PPA to include an explicit finding that "any procurement pursuant to this Agreement is procurement from an eligible 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 (*Public Utilities Code Section 399.11 et seq.*), Decision 03-06-071, or other applicable law.<sup>28</sup>

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, neither 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 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 solicitations. 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.

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

- <sup>27</sup> See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.
- <sup>28</sup> See, e.g. D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

#### 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, and will be placed on the Commission's agenda no earlier than 30 days from today.

#### FINDINGS AND CONCLUSIONS

- 1. The Copper Mountain 2 PPA is consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
- 2. The Copper Mountain 2 PPA is consistent with PG&E's 2011 RPS Procurement Plan, as approved by D.11-04-030.
- 3. The Copper Mountain 2 PPA was evaluated consistent with the LCBF methodology identified in PG&E's RPS Procurement Plan.
- 4. The Copper Mountain 2 PPA includes the Commission adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.
- 5. Consistent with D.06-05-039 and D.09-06-050, an independent evaluator oversaw PG&E's negotiations with Copper Mountain 2.
- 6. Since the Copper Mountain 2 facility is not directly interconnected to a California Balancing Authority and has not yet obtained a Participating Generator Agreement with the CAISO, the Commission cannot make a determination that this is a bundled contract or that it qualifies for the first portfolio content category established by SB 2 (1X).
- 7. The costs associated with the Copper Mountain 2 PPA reasonably compares to the results of PG&E's 2009 RPS solicitation and recently executed contracts.
- 8. Payments made by PG&E under the Copper Mountain 2 PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of PG&E's administration of the PPA.

- 9. Based on a 2012 commercial online date for the Copper Mountain 2 facility, the 25-year PPA is below the 2009 MPR and accordingly the PPA does not have above-market costs associated with it.
- 10. PG&E has demonstrated that it has an incremental need for RPS-eligible generation in the first compliance period, 2011-2013 which the Copper Mountain 2 PPA will contribute to.
- 11. The Copper Mountain 2 PPA meets the conditions for EPS compliance because it is for intermittent generation with a capacity factor less than 60 percent.
- 12. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the Copper Mountain 2 PPA.
- 13. As a new facility, delivering pursuant to long-term contracts, the Copper Mountain 2 PPA will contribute to PG&E's minimum quantity requirement established in D.07-05-028.
- 14. 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.
- 15. AL 3884-E should be approved effective today without modification.

#### THEREFORE IT IS ORDERED THAT:

- 1. Pacific Gas and Electric Company's Advice Letter 3884-E, requesting Commission review and approval of a power purchase agreement with Copper Mountain 2, LLC, is approved without modification.
- 2. Before Pacific Gas and Electric Company exercises the option in its power purchase agreement with Copper Mountain 2, LLC, pursuant to section 3.9(c) (iv), to have Copper Mountain 2, LLC accelerate the development of the remaining 58 megawatts of the Copper Mountain 2 Project, Pacific Gas and Electric Company shall first consult its Procurement Review Group. If in consultation with its Procurement Review Group Pacific Gas and Electric Company determines that it is reasonable to exercise the option, Pacific Gas and Electric Company shall file a Tier 2 Advice Letter to notify the Commission of Pacific Gas and Electric Company must clearly demonstrate that exercising the option is necessary for Pacific Gas and Electric Company to meet its Renewables Portfolio Standard compliance obligations.

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 15, 2011; the following Commissioners voting favorably thereon:

> PAUL CLANON Executive Director

### **Confidential Appendix A**

Evaluation Summary of the Copper Mountain 2 PPA

[REDACTED]

### **Confidential Appendix B**

### Independent Evaluator's Report regarding PG&E's PPA with Copper Mountain 2<sup>29</sup>

### [REDACTED]

<sup>&</sup>lt;sup>29</sup> Confidential Appendix C to Advice Letter 3884-E, Report of the Independent Evaluator on the 150 MW Copper Mountain 2 contract relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO) July 29, 2011