

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Agenda Item 10  
Agenda ID 13293  
RESOLUTION E-4666(rev.2)  
October 16, 2014

**REDACTED**  
**RESOLUTION**

Resolution E-4666. Pacific Gas and Electric Company's Two Renewable Energy Power Purchase Agreements With Sand Hill Wind II, LLC (Altamont and Dyer Road).

PROPOSED OUTCOME:

- This resolution approves cost recovery for the two renewable energy power purchase agreements between Pacific Gas and Electric Company and Sand Hill Wind II, LLC (Altamont and Dyer Road). The power purchase agreements are approved without modification.

SAFETY CONSIDERATIONS:

- The power purchase agreements require the seller of the generation to comply with all applicable requirements of law relating to the projects.

ESTIMATED COST:

- Costs of the power purchase agreements are confidential at this time.

By Advice Letter 4364-E filed on February 20, 2014.

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**SUMMARY**

**Pacific Gas & Electric Company’s (PG&E) renewable energy power purchase agreements (PPAs) with Sand Hill Wind II, LLC (Sand Hill Wind II) comply with the Renewables Portfolio Standard (RPS) procurement guidelines and are approved without modifications.**

PG&E filed Advice Letter (AL) 4364-E on February 20, 2014, requesting California Public Utilities Commission (Commission) approval of two twenty-year renewable energy PPAs between PG&E and Sand Hill Wind II, a subsidiary of Ogin, Inc. (Ogin). The PPA was procured through PG&E’s 2012 RPS solicitation. Pursuant to the PPAs, RPS-eligible generation will be purchased from the Sand Hill Wind II facilities at Altamont and Dyer Road, which are located in Tracy, California. The Sand Hill Wind II facility at Altamont has a capacity of 8.6 megawatts (MW) and the Dyer Road facility has a capacity of 11.4 MW.

This resolution approves the Sand Hill Wind II PPAs. PG&E’s execution of these PPAs 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 Sand Hill Wind II PPAs are reasonably priced and fully recoverable in rates over the life of the PPAs, subject to Commission review of PG&E’s administration of the PPAs.

The following table provides a summary of the Sand Hill Wind II PPAs.

**Table 1: Summary of Sand Hill Wind II PPAs**

<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>
Sand Hill Wind II – Altamont	Wind, re-power	8.6	22.8	April 1, 2020	20	Tracy, CA
Sand Hill Wind II – Dyer Road	Wind, re-power	11.4	30.2	April 1, 2020	20	Tracy, 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 Public Utilities Code Sections 399.11-399.31.<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 for compliance period (CP) 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 4364-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 96-B.

## **PROTESTS**

PG&E's AL 4364-E was not protested.

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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.

<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).

## **DISCUSSION**

### **Pacific Gas & Electric Company requests approval of the renewable energy power purchase agreements with Sand Hill Wind II, LLC.**

On February 20, 2014, PG&E filed AL 4364-E requesting Commission approval of two long-term PPAs with Sand Hill Wind II. The PPAs entail the repowering of two operational wind qualifying facilities (QFs). After expiration of the QF contracts (for the facilities) in 2015, the existing wind turbines and related equipment will be removed and the facilities will be replaced with new Ogin wind turbines.<sup>4</sup> Pursuant to the Sand Hill Wind II PPAs, PG&E will receive approximately 53 gigawatt-hours (GWh) of RPS-eligible deliveries annually.

The Sand Hill Wind II facilities are located in Tracy, California and both facilities have a first point of interconnection with the California Independent System Operator (CAISO), a California balancing authority.

### **PG&E requests that the Commission issue a resolution that:**

1. Approves the PPAs in their entirety, including payments to be made by PG&E pursuant to the PPAs, subject to the Commission's review of PG&E's administration of the PPAs.
2. Finds that any procurement pursuant to the PPAs are procurement from eligible renewable energy resources for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California RPS (Public Utilities Code Section 399.11 et seq.), D.03-06-071, D.06-10-050, D.11-12-020, D.11-12-052 or other applicable law.
3. Finds that all procurement and administrative costs, as provided by Public Utilities Code Section 399.13(g), associated with the PPAs shall be recovered in rates.

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<sup>4</sup> Ogin proposes to manufacture a shrouded turbine design featuring a patented "mixer ejector wind turbine", much smaller in size than most conventional wind turbines whose manufacturers continue to pursue cost improvements through economies of scale.

4. Adopts the following finding of fact and conclusion of law in support of CPUC Approval:
  - a. The PPAs are consistent with PG&E's 2012 RPS procurement plan.
  - b. The terms of the PPAs, including the prices of delivered energy, are reasonable.
5. Adopts the following finding of fact and conclusion of law in support of cost recovery for the PPAs:
  - a. The utility's costs under the PPAs shall be recovered through PG&E's Energy Resource Recovery Account.
  - b. Any stranded cost that may arise from the PPAs 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 PPAs are 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, are 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 PPAs 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 Sand Hill Wind II PPAs on the Following Criteria:**

- Consistency with PG&E's 2012 RPS Procurement Plan
- Consistency with PG&E's Least-Cost, Best-Fit requirements
- Consistency with RPS Standard Terms and Conditions
- Consistency with Portfolio Content Category 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
- 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 solicitation.<sup>5</sup> The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan.

The Sand Hill Wind II PPAs were executed on December 16, 2013. At the time the PPAs were executed, the most recent Commission-approved Plan was PG&E's 2012 Plan, which was conditionally approved in D.12-11-016. 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>6</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 solicitation, with a preference for long-term contracts that qualify as Portfolio Content Category (PCC) 1 products<sup>7</sup> with initial RPS deliveries starting in 2019-2020.

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<sup>5</sup> Pub. Util. Code, § 399.14.

<sup>6</sup> Pub. Util. Code, §399.14(a)(3).

<sup>7</sup> In D.11-12-052 the CPUC implemented RPS Portfolio Content Category (PCC) classifications as specified by Pub. Util. Code § 399.16. PCC 1 is applicable to any facility that is directly interconnected to a California balancing authority or delivering RPS eligible electricity into California on an hourly or sub-hourly basis.

The Sand Hill Wind II PPAs fit within PG&E's stated RPS procurement goal of an additional annual 1,000 GWh of RPS generation. Additionally, the long-term PPAs are expected to satisfy the criteria of PCC 1. Any deliveries from the Sand Hill Wind II PPAs that are in excess of PG&E's RPS procurement quantity requirement (PQR) may be banked by PG&E and used to satisfy future RPS compliance needs.

The Sand Hill Wind II power purchase agreements are consistent with PG&E's 2012 renewable portfolio standard 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 has been recently modified by SB 2 (1X), which became effective on December 10, 2011. SB 2 (1X) made significant changes to the RPS Program.<sup>8</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>9</sup>

PG&E currently projects that its existing RPS portfolio will provide enough RPS generation to meet its needs in CP 1 (2011-2013) and CP 2 (2014-2016). Beginning in CP 3 (2017-2020), PG&E projects that it has a need to procure additional RPS generation. The Sand Hill Wind II PPAs are contracted to begin delivering RPS-eligible energy on April 1, 2020, which aligns with PG&E's CP 3 RPS need.

Renewable portfolio standard eligible generation from the Sand Hill Wind II power purchase agreements fits the portfolio need requirements of PG&E's renewable portfolio standard portfolio.

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<sup>8</sup> The Commission opened Rulemaking (R.) 11-05-005 (May 5, 2011) to implement the new RPS law.

<sup>9</sup> See § 399.15(b)(2)(B), SB 2 (1X).

### **Consistency with PG&E's Least-Cost Best-Fit (LCBF) 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 and D.04-07-029. 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 decision directs the utilities to use certain criteria in their bid selection. 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.

PG&E examined the reasonableness of the Sand Hill Wind II PPAs using the LCBF methodology that was approved in PG&E's 2012 RPS Plan, the most recent plan approved at the time of the Sand Hill Wind II PPAs' execution. When compared against offers from PG&E's 2012 RPS solicitation and offers executed by PG&E in the previous 12 months using LCBF, the Sand Hill Wind II PPAs compare favorably for price, value, viability, and need. See Confidential Appendix A for more details.

PG&E adequately examined the reasonableness of the Sand Hill Wind II power purchase agreements utilizing its least cost, best fit methodology in place during the time that the power purchase agreements were negotiated and executed.

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

The Commission adopted a set of standard terms and conditions (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 in D.10-03-021, as modified by D.11-01-025.

The Sand Hill Wind II power purchase agreements include the Commission adopted renewable 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.

### **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 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 PPAs and the risks and value to ratepayers if the proposed PPA ultimately results in renewable energy credits in another PCC.

In AL 4364-E, PG&E claims that the product procured pursuant to the Sand Hill Wind II PPAs will be classified as PCC 1. To support its claim, PG&E asserts that the Sand Hill Wind II PPAs require Ogin to provide both the energy and renewable energy certificates associated with generation from the PPA. PG&E also states in the AL that the facility is interconnected directly to the CAISO transmission system, a California balancing authority area.

Consistent with D.11-12-052, PG&E provided information in advice letter 4364-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the Sand Hill Wind II power purchase agreements.

### **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>10</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

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<sup>10</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).

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>11</sup>

Because the Sand Hill Wind II power purchase agreements are considered greater than 10 years in length, the power purchase agreements may be construed as counting toward the minimum quantity requirements that the Commission established in D.12-06-038.

### **Independent Evaluator Review**

PG&E retained independent evaluator (IE) Arroyo Seco Consulting Group (Arroyo) to oversee its 2012 RPS solicitation and to evaluate the overall merits of each PPA submitted to the Commission for approval. Arroyo compared the price and value of the Sand Hill Wind II PPAs against competing offers from PG&E's 2012 RPS solicitation using Arroyo's proprietary evaluation model. Based on this comparison, Arroyo opines that the Sand Hill Wind II PPAs rank moderate, not low, for price and high for value when compared against all 2012 Offers. Finally, Arroyo opines that the project ranks low in project viability. See Confidential Appendix B for a detailed explanation of the IE's findings.

Consistent with D.06-05-039, an independent evaluator oversaw PG&E's renewable portfolio standard procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations with Ogin and compared the costs and value of the Sand Hill Wind II power purchase agreements 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 PPAs' price against other RPS offers received in recent RPS solicitations and against contracts executed in the 12 months prior to the proposed PPA's execution date. Using this analysis and the confidential

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<sup>11</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.

analysis provided by PG&E in AL 4364-E, the Commission determines that the price and value of the Sand Hill Wind II PPAs are reasonable. See Confidential Appendix A for a price and value comparison of the Sand Hill Wind II PPAs against the appropriate cohorts.

The Sand Hill Wind II PPAs rank moderate for price and high in portfolio-adjusted value (PAV)<sup>12</sup> when compared against RPS offers from PG&E's 2012 RPS solicitation and contracts executed by PG&E 12 months prior to executing the Sand Hill Wind II PPAs.

The Sand Hill Wind II PPAs have moderate to high prices and moderate to low net market values (NMV) when compared against the price and NMV of other shortlisted bids from PG&E's 2012 RFO.

Payments made by PG&E under the Sand Hill Wind II power purchase agreements are fully recoverable in rates over the life of the power purchase agreements, subject to Commission review of PG&E's administration of the power purchase agreements.

### **Project Viability Assessment**

The Sand Hill Wind II facilities will begin re-power development following their QF contracts expire in 2015. Arroyo provided the following viability information about the re-power of the Sand Hill Wind II facilities at Altamont and Dyer Hill.

#### *Project development experience*

Ogin (formerly FloDesign Wind Turbine) was founded in 2007. Ogin's project development subsidiary, New Dimension Energy Company, has secured RPS contracts with both PG&E (for a 20-MW project with Sand Hill Wind I, LLC) and Edison (for a 16-MW Smoke Tree wind project in Riverside County) through the utilities' Renewable Auction Mechanism, and is contractually obligated to begin deliveries under those contracts by guaranteed on-line dates in 2015. Both Sand Hill Wind I and Smoke Tree wind have received their conditional use permits and anticipate achieving their commercial operation dates on schedule.

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<sup>12</sup> Portfolio adjusted value is similar to net market value, however, the valuation metrics are adjusted by PG&E's portfolio preferences and forecasted need.

*Ownership/O&M experience*

Ogin has no prior experience as a company owning or operating a utility scale wind facility. The Ogin turbines proposed for the Sand Hill Wind II facilities are a proprietary, patented technology that differ from traditional wind turbine technology. Notably, the Ogin turbine utilizes a mixer-ejector shroud to change the pattern of airflow through and around the turbine.

*Technical feasibility*

Ogin reports that it has numerous patents on its mixer ejector wind turbine technology. The technology has not been deployed commercially, the turbines are being pilot-tested at two sites.

*Manufacturing supply chain*

Ogin will rely on its patented, proprietary mixer ejector wind turbine technology for key components of the Sand Hill Wind II facilities, with the expectation that the proprietary technology of its “unique shroud design” will improve annual energy output per kilowatt (kW) and peak energy output per unit of swept area. Additional information regarding the production chain for the Sand Hill II PPAs can be found in Confidential Appendix A.

*Site control*

Ogin has secured full site control for the Sand Hill Wind II facilities.

*Permitting*

Sand Hill Wind II has applied to Alameda County for a conditional use permit for repowering at its sites in at least two phases: an initial repower to remove about seventy existing turbines and erect forty new Ogin turbines totaling 4 MW, and a subsequent phase or phases to remove the other existing turbines and install up to an additional 32 MW of Ogin turbines.

Additional information regarding the site control for the Sand Hill II PPAs can be found in Confidential Appendix A.

*Resource quality*

Ogin claims multiple benefits over traditional utility-scale wind turbines such as: a higher capacity factor, decreased avian mortalities, and reduced need for expensive modifications to the transmission system.

Ogin asserts that the mixer shroud accelerates wind through the rotor, increasing power extraction, while simultaneously lowering turbulence around the turbine which lessens mechanical strain and could reduce long-term O&M costs. Exit air passes from the mixer shroud into the larger ejector shroud where additional outside air is introduced. The introduction of outside air equalizes pressure with exterior wind passing by the turbine, and enables the ejector to spread the wind wake over a larger area, reducing turbulence aft of the turbine and ultimately allowing Ogin turbines to be positioned closer to one another.

Ogin's cost models indicate that the turbine's capital cost will be moderately higher per installed kW than conventional utility turbines, but substantially below the cost of conventional open-bladed turbines of similar capacity rating.

The PG&E Sand Hill Wind II PPA will support the CEC's multi-year study of the turbine's avian impacts, which was approved by Alameda County in 2012 and is the subject of a multi-year study funded by the California Energy Commission's (CEC) Public Interest Energy Research program in 2012. Phase I deployment of the study commenced in 2012 at the Sand Hill Wind I facility.<sup>13</sup> Ogin hypothesizes that its low-profile, shroud turbines will reduce birds' exposure to the turbine blades and that their proprietary technology will pose both a visual and physical barrier to entry by birds reducing wind turbine avian mortalities.

Finally, the Ogin turbine may offer lower all-in project costs per MWh compared to other utility-scale wind turbine installations. The Ogin turbine could enable deployment of wind turbines closer to populated load centers and at distribution voltages, resulting in cost savings related to long-line transmission and high-voltage equipment. For behind-the-meter projects, it may be easier to match retail customers' capacity requirements with smaller turbines. Additionally, the Ogin turbine offers a modular design that allows individual components to be

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<sup>13</sup> Study is ongoing and results are not yet available for review.

delivered to an installation site using existing roads. These features will reduce or sidestep additional roadway and/or transmission system construction costs that are often associated with utility-scale wind projects.

*Project Financing*

Ogin, Inc. and its project development subsidiary New Dimension Energy Company have, to date, not financed a new or re-power commercial generation project of any technology or capacity.

Additional information regarding the project financing for the Sand Hill II PPAs can be found in Confidential Appendix A.

*Interconnection progress*

The existing turbines at the Sand Hill Wind II project site are already interconnected to the grid under the original QF agreements, under CPUC rather than FERC jurisdiction. For operation after the QF agreements expire, generators must obtain a FERC-jurisdictional interconnection through the CAISO.

Additional information regarding the interconnection progress for the Sand Hill II PPAs can be found in Confidential Appendix A.

*Reasonableness of COD*

Potential risks to meeting project deadlines include: a potential finding by the CAISO that the project must undergo the full interconnection study process and difficulties obtaining project financing for a new and commercially unproven technology.

Additional information regarding the reasonableness of COD for the Sand Hill II PPAs can be found in Confidential Appendix A.

It is reasonable to expect that Sand Hill Wind II facilities will be able to meet the terms and conditions in the PPA.

### **Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)**

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>14</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 (GHG) emissions of a combined-cycle gas turbine power plant. Generating facilities using certain renewable resources are deemed compliant with the EPS.<sup>15</sup>

The Sand Hill Wind II power purchase agreements are not covered procurement subject to the emissions performance standard because both generating facilities have a forecast annualized capacity factor of less than 60 percent and therefore are not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim Emission Performance Standard Rules.

### **Procurement Review Group Participation**

The Procurement Review Group (PRG) was initially established in D.02-08-071 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 as a mechanism for procurement review by non-market participants.

According to PG&E, participants in its PRG included representatives from the Division 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 Sand Hill Wind II PPAs were presented to the PRG at PG&E's March and November 2013 PRG meetings.

Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the Sand Hill Wind II power purchase agreements.

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<sup>14</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>15</sup> D.07-01-039, Attachment 7, p. 4.

### **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 Sand Hill Wind II facilities are charged with enforcing safety, environmental and other regulations including decommissioning. Section 3.9(a) of the PPA requires Ogin (the entity with control over on-site decisions) to “acquire all permits and other approvals necessary for the construction, operation and maintenance of the Project.” The safety provisions in the Sand Hill Wind II PPAs 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 Ogin.

### **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 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>16</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 renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources”

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<sup>16</sup> See, e.g. D.08-04-009 at Appendix A, STC 6, Eligibility.

pursuant to the California Renewables Portfolio Standard (*Public Utilities Code Section 399.11 et seq.*), D.11-12-020 and D.11-12-052, or other applicable law.”<sup>17</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-renewable portfolio standard 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 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.

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.

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<sup>17</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 on September 15, 2014. No comments were received.

## **FINDINGS AND CONCLUSIONS**

1. The Sand Hill Wind II power purchase agreements are consistent with PG&E's 2012 Renewables Portfolio Standard Procurement Plan, as approved by D.12-11-016.
2. Renewable portfolio standard eligible generation from the Sand Hill Wind II power purchase agreements fits the portfolio need requirements of PG&E's renewable portfolio standard portfolio.
3. PG&E adequately examined the reasonableness of the Sand Hill Wind II power purchase agreements utilizing its least cost, best fit methodology in place during the time that the power purchase agreements were negotiated and executed.
4. The Sand Hill Wind II power purchase agreements include the Commission adopted renewable 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.
5. Consistent with D.11-12-052, PG&E provided information in advice letter 4364-E regarding the expected portfolio content category classification of the renewable energy credits to be procured pursuant to the Sand Hill Wind II power purchase agreements.
6. Because the Sand Hill Wind II power purchase agreements are considered greater than 10 years in length, the power purchase agreements may be construed as counting toward the minimum quantity requirements that the Commission established in D.12-06-038.

7. Consistent with D.06-05-039, an independent evaluator oversaw PG&E's renewable portfolio standard procurement process. Additionally, an independent evaluator oversaw PG&E's negotiations with Ogin and compared the costs and value of the Sand Hill Wind II power purchase agreements against peer groups consisting of alternative competing proposals currently or recently available to PG&E.
8. The Sand Hill Wind II power purchase agreements rank moderate for price and high in value when compared against renewable portfolio standard offers from PG&E's 2012 renewable portfolio standard solicitation and contracts executed by PG&E 12 months prior to executing the Sand Hill Wind II power purchase agreements.
9. The Sand Hill Wind II power purchase agreements have moderate to high prices and moderate to low net market values when compared to the median price and net market value of other shortlisted bids from PG&E's 2012 solicitation.
10. Payments made by PG&E under the Sand Hill Wind II power purchase agreements are fully recoverable in rates over the life of the power purchase agreements, subject to Commission review of PG&E's administration of the power purchase agreements.
11. It is reasonable to expect that Sand Hill Wind II facilities will be able to meet the terms and conditions in the power purchase agreements.
12. The Sand Hill Wind II power purchase agreements are not covered procurement subject to the emissions performance standard because both generating facilities have a forecast annualized capacity factor of less than 60 percent and therefore are not baseload generation under paragraphs 1(a)(ii) and 3(2)(a) of the Adopted Interim Emission Performance Standard Rules.
13. Pursuant to D.02-08-071, PG&E's Procurement Review Group participated in the review of the Sand Hill Wind II power purchase agreements.
14. Procurement pursuant to the Sand Hill Wind II power purchase agreements is procurement from eligible renewable energy resources for purposes of determining PG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California

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-RPS eligible renewable energy resource under these PPAs to count towards an RPS compliance obligation. Nor shall that finding absolve PG&E of its obligation to enforce compliance with these PPAs.
16. 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.
17. Advice Letter 4364-E should be approved effective today.

**THEREFORE IT IS ORDERED THAT:**

1. Pacific Gas & Electric Company's Advice Letter 4364-E requesting Commission approval of power purchase agreements with Sand Hill Wind II, 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 on October 16, 2014; the following Commissioners voting favorably thereon:

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PAUL CLANON  
Executive Director

## **Confidential Appendix A**

Price/Value Reasonableness, Need, and Viability

[REDACTED]

## **Confidential Appendix B**

### Independent Evaluator Conclusions and Recommendations

[REDACTED]

## **Confidential Appendix C**

### Sand Hill PPAs Major Contract Provisions

[REDACTED]