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

#### **ENERGY DIVISION**

ID #11153 RESOLUTION E-4466 April 19, 2012

#### REDACTED

## RESOLUTION

Resolution E-4466. San Diego Gas & Electric Company requests approval of twenty-one (21) renewable energy power purchase agreement with Sol Orchard San Diego I LLC through Sol Orchard San Diego 4 LLC, Sol Orchard San Diego 6 LLC through Sol Orchard San Diego 10 LLC and Sol Orchard San Diego 12 LLC through Sol Orchard San Diego 23 LLC.

PROPOSED OUTCOME: This resolution approves cost recovery for twenty-one (21) long-term renewable energy power purchase agreements between San Diego Gas & Electric Company and Sol Orchard San Diego I LLC through Sol Orchard San Diego 4 LLC, Sol Orchard San Diego 6 LLC through Sol Orchard San Diego 10 LLC and Sol Orchard San Diego 12 LLC through Sol Orchard San Diego 23 LLC. These power purchase agreements are approved with modifications to cap at \$13.5 million the costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability).

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

By Advice Letter 2268-E filed on July 6, 2011.

### **SUMMARY**

San Diego Gas & Electric Company's renewable energy power purchase agreements with Sol Orchard San Diego I LLC through Sol Orchard San Diego 4 LLC, Sol Orchard San Diego 6 LLC through Sol Orchard San Diego 10 LLC and Sol Orchard San Diego 12 LLC through Sol Orchard San Diego 23 LLC (collectively, "Sol Orchard") comply with the Renewables Portfolio Standard procurement guidelines and are approved with modifications to

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cap at \$13.5 million the costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability).

San Diego Gas & Electric Company ("SDG&E") filed Advice Letter 2268-E on July 6, 2011 requesting California Public Utilities Commission ("Commission") approval of twenty-one (21) renewable energy power purchase agreements ("PPAs") with 25 year terms between SDG&E and Sol Orchard. SDG&E's request is approved with modifications to cap ratepayer costs for distribution and transmission upgrades (network and reliability) at \$13.5 million.

The bilaterally negotiated PPAs are for generation from twenty-one different solar-tracking photovoltaic facilities. The facilities are split into two groups: the first group ("Sol Orchard I") consisting of fifteen facilities with nameplate capacities of 1.5-2.0 megawatt (MW) each, and the second group ("Sol Orchard II") consisting of four facilities with nameplate capacities of 1.5-2.5 MW and two facilities with nameplate capacities of 3.0-5.0 MW. The Sol Orchard I facilities are each projected to deliver between 4.3 and 4.7 gigawatt-hours (GWh) of generation annually with commercial operation dates (COD) of December 31, 2012. The Sol Orchard II facilities have CODs of December 31, 2013 with the smaller facilities projected to generate between 5.1 and 5.3 GWh/year while the two larger facilities are projected to generate between 10.1 and 10.3 GWh/year. Cumulatively, Sol Orchard I and II ("the Project") will carry a nameplate capacity up to 50 MW with annual generation up to 120 GWh/year.

SDG&E must modify both the Sol Orchard I PPAs and the Sol Orchard II PPAs to include an aggregate cap on overall ratepayer costs at \$13.5 million for distribution and transmission upgrades (network and reliability) required to interconnect these projects.

This resolution approves the Sol Orchard PPAs with the modifications described above to ratepayer costs for network upgrades. SDG&E's execution of these PPAs is consistent with its 2011 RPS Procurement Plan, including its resource need, which the Commission approved in Decision 11-04-030. Deliveries under the Sol Orchard PPAs are reasonably priced and fully recoverable in rates over the life of the power purchase agreements, subject to Commission review of SDG&E's administration of the PPAs.

The Tables below provide an overview of the Sol Orchard facilities. Table 1 provides a cumulative summary of all twenty-one projects, while Table 2 breaks out each facility separately:

#### Table 1. Cumulative Summary of all Twenty-One Sol Orchard PPAs

| Generating Facility     | Technolog<br>y | Term<br>(Years<br>) | Max.<br>Capacit<br>y (MW) | Energy<br>(GWh/yr) | Online<br>Date  | Location                |
|-------------------------|----------------|---------------------|---------------------------|--------------------|---|-------------------------|
| 21 different facilities | Tracking<br>PV | 25                  | 34.5 - 50                 | 76 - 120           | 12/31/12 for<br>Sol Orchard I<br>12/31/13 for<br>Sol Orchard II | San Diego<br>County, CA |

Table 2. Summary of Each of the Twenty-One Sol Orchard PPAs

| Generating Facility  | Technology<br>Type | Term<br>(Years) | Maximum<br>Capacity<br>(MW) | Energy<br>(GWh/year) | Online<br>Date | Location                |  |
|----------------------|--------------------|-----------------|-----------------------------|----------------------|----------------|-------------------------|--|
| Sol Orchard I        |                    |                 |                             |                      |                |                         |  |
| Boulevard 1          | Tracking PV        | 25              | 1.5-2.0                     | 4.6                  | 12/31/2012     | San Diego<br>County, CA |  |
| Boulevard 2          | Tracking PV        | 25              | 1.5-2.0                     | 4.6                  | 12/31/2012     | San Diego<br>County, CA |  |
| Boulevard 3          | Tracking PV        | 25              | 1.5-2.0                     | 4.6                  | 12/31/2012     | San Diego<br>County, CA |  |
| Boulevard 4          | Tracking PV        | 25              | 1.5-2.0                     | 4.6                  | 12/31/2012     | San Diego<br>County, CA |  |
| Crestwood            | Tracking PV        | 25              | 1.5-2.0                     | 4.7                  | 12/31/2012     | San Diego<br>County, CA |  |
| Glencliff            | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Buckman              | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Campo                | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Borrego<br>Springs 1 | Tracking PV        | 25              | 1.5-2.0                     | 4.6                  | 12/31/2012     | San Diego<br>County, CA |  |
| Borrego<br>Springs 2 | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Borrego<br>Springs 4 | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Ranchita             | Tracking PV        | 25              | 1.5-2.0                     | 4.4                  | 12/31/2012     | San Diego<br>County, CA |  |
| Santa<br>Ysabel      | Tracking PV        | 25              | 1.5-2.0                     | 4.5                  | 12/31/2012     | San Diego<br>County, CA |  |
| Mesa                 | Tracking PV        | 25              | 1.5-2.0                     | 4.3                  | 12/31/2012     | San Diego               |  |

| Grande               |                |    |         |      |            | County, CA              |  |  |
|----------------------|----------------|----|---------|------|------------|-------------------------|--|--|
| Jamul-Lake<br>Barret | Tracking PV    | 25 | 1.5-2.0 | 4.4  | 12/31/2012 | San Diego<br>County, CA |  |  |
|                      | Sol Orchard II |    |         |      |            |                         |  |  |
| Alpine               | Tracking PV    | 25 | 1.5-2.5 | 5.3  | 12/31/2013 | San Diego<br>County, CA |  |  |
| Pauma<br>Valley      | Tracking PV    | 25 | 1.5-2.5 | 5.2  | 12/31/2013 | San Diego<br>County, CA |  |  |
| Ramona 1             | Tracking PV    | 25 | 1.5-2.5 | 5.1  | 12/31/2013 | San Diego<br>County, CA |  |  |
| Ramona 2             | Tracking PV    | 25 | 3.0-5.0 | 10.3 | 12/31/2013 | San Diego<br>County, CA |  |  |
| Valley<br>Center 1   | Tracking PV    | 25 | 1.5-2.5 | 5.1  | 12/31/2013 | San Diego<br>County, CA |  |  |
| Valley<br>Center 2   | Tracking PV    | 25 | 3.0-5.0 | 10.1 | 12/31/2013 | San Diego<br>County, CA |  |  |

## 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). The RPS program is codified in Public Utilities Code Sections 399.11-399.31. 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 2011-2013; 25 percent of retail sales by December 31, 2016; and 33 percent of retail sales by December 31, 2020.

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at

<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.

<sup>&</sup>lt;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).

http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm and http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm.

## **NOTICE**

Notice of AL 2268-E was made by publication in the Commission's Daily Calendar. San Diego Gas & Electric states that a copy of the Advice Letter was mailed and distributed in accordance with Section 3.14 of General Order 96-B.

#### **PROTESTS**

SDG&E Advice Letter 2268-E was timely protested by Backcountry Against Dumps ("BAD") on behalf of BAD and the Protect Our Communities Foundation ("POC") on July 26, 2011. SDG&E responded to the protest on August 2, 2011.

#### **DISCUSSION**

San Diego Gas & Electric Company requests approval of twenty-one (21) long-term renewable energy power purchase agreements with Sol Orchard.

On July 6, 2011, San Diego Gas and Electric Company ("SDG&E") filed Advice Letter ("AL") 2268-E requesting California Public Utilities Commission ("Commission") approval of twenty-one long-term power purchase agreements ("PPAs") with Sol Orchard. SDG&E's request is approved with modifications.

SDG&E must modify the PPAs to include an aggregate cap of \$13.5 million on ratepayer costs for distribution and transmission upgrades (network and reliability) to interconnect the Sol Orchard I and Sol Orchard II projects.

SDG&E expects the Sol Orchard projects to deliver approximately 68 GWh/year of generation from fifteen facilities (Sol Orchard I) with a December 31, 2012 COD, and approximately an additional 41 GWh/year of generation from the six facilities (Sol Orchard II) with a December 31, 2013 COD. SDG&E expects deliveries from the Sol Orchard I projects to help meet its risk-adjusted net short position during the first compliance period established by Public Utilities Code § 399.15(b)<sup>4</sup>. Moreover, the future deliveries from the 25 year PPAs will help to address SDG&E's significant risk-adjusted annual net short positions during the third compliance period established by § 399.15(b).

<sup>&</sup>lt;sup>4</sup> Future RPS compliance obligations are generally defined in §399.15(b) as follows: SDG&E must procure RPS-eligible resources equivalent to an average of 20% of retail sales for 2011-2013; 25% of retail sales by the end of 2016; and 33% of retail sales by 2020 and for each year thereafter. These target periods are referred to, respectively, as Compliance Periods 1, 2, and 3.

The Sol Orchard Projects are sited entirely on private lands obtained by Sol Orchard and are being developed using solar photovoltaic tracking technology incorporating PV modules. The developer is planning to utilize Sol Focus, Inc. as the module supplier for a minimum of 60% of the planned capacity, with the possibility of utilizing Concentrated Solar Photovoltaic (CPV) technology for some of these projects. The PPAs, however, provide no contractual requirement that any particular type of PV technology be utilized for any of these projects.

## SDG&E requests that the Commission issue a resolution that finds:

- 1. The Proposed Agreements are consistent with SDG&E's CPUC-approved RPS Plan and procurement from the Proposed Agreements will contribute towards SDG&E's RPS procurement obligation.
- 2. SDG&E's entry into the Proposed Agreements and the terms of such agreements are reasonable; therefore, the Proposed Agreements are approved in their entirety and all administrative and procurement costs associated with the Proposed Agreements, including for energy, green attributes, and resource adequacy, are fully recoverable in rates over the life of the Proposed Agreements, subject to Commission review of SDG&E's administration of the Proposed Agreements.
- 3. Generation procured pursuant to the Proposed Agreements constitutes generation from an eligible renewable energy resources for purposes of determining SDG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewable Portfolio Standard program (Public Utilities Code §§ 399.11, et seq. and/or other applicable law) and relevant Commission decisions.
- 4. The Proposed Agreements will contribute to SDG&E's minimum quantity requirement established in D.07-05-028.
- 5. Expected deliveries under the Proposed Agreements are eligible for earmarking treatment under RPS flexible compliance mechanisms.

### **Energy Division Evaluated the Sol Orchard PPAs on the following criteria:**

- Consistency with bilateral contracting rules
- Consistency with SDG&E's 2009 and 2011 RPS Procurement Plans
- Consistency with SDG&E's Least-Cost, Best-Fit requirements
- Consistency with RPS standard terms and conditions
- Independent Evaluator review
- Cost reasonableness and market premium
- Portfolio need
- 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
- Protest filed by Backcountry Against Dumps (BAD)

# **Consistency with Bilateral Contracting Rules**

According to SDG&E, Sol Orchard approached the utility with the proposed bilateral transaction in August 2010 because of the uncertainty over the timing of both the 2011 Request For Offers ("RFO") and the approval of the Renewable Auction Mechanism ("RAM") program. As a result, and to avoid what SDG&E perceived would result in a delayed COD, it entered into bilateral negotiations with Sol Orchard to take advantage of the developer's proposed early commercial operation date (December 2012) that would allow the utility to address its risk-adjusted net short position during the first compliance period of SB 2 (1X). Bilateral negotiations formally began in October 2010 and the PPAs were executed in July 2011.

In D.06-10-019, the Commission established rules pursuant to which the IOUs could enter into bilateral RPS contracts. SDG&E adhered to these bilateral contracting rules because the PPAs are longer than one month in duration, the PPAs were filed by advice letter, 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 Sol Orchard PPAs were compared to other RPS offers received in SDG&E's most recent RPS solicitation, bilateral offers, and other agreements executed during the same timeframe; the proposed agreement was reviewed by SDG&E's Procurement Review Group; and an independent evaluator oversaw evaluation of the projects and negotiation of the PPAs.

The Sol Orchard PPAs are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.

## Consistency with SDG&E's 2009 and 2011 RPS Procurement Plans

Pursuant to statute, SDG&E's RPS Procurement Plan (Plan) includes an assessment of supply and demand to determine the optimal mix of renewable generation resources and a bid solicitation protocol setting forth the need for renewable generation of various operational characteristics.<sup>5</sup> California's RPS statute also requires that the Commission review the results of an RPS solicitation submitted to the CPUC for approval by a utility.<sup>6</sup> The Commission reviews the results to verify that the utility conducted its solicitation according to its Commission-approved procurement plan.<sup>7</sup>

During the time that these PPAs were negotiated, SDG&E was operating under its 2009 RPS Procurement Plan; these PPAs conform to that plan. In SDG&E's 2011 RPS Plan, its most recent approved plan, SDG&E expressed a commitment to contract in excess of its mandated annual procurement targets and goal of 33 percent renewables by 2020. SDG&E's 2011 RPS Plan also called for SDG&E to issue a competitive solicitation for electric energy generated by eligible renewable resources that could begin delivering in 2011, 2012, 2013, 2014, and 2015 for terms of one month to 30 years in length. Proposals could be for peaking, baseload, dispatchable, or as-available deliveries. SDG&E additionally expressed preference for projects that could contribute towards SDG&E's Sunrise Powerlink commitment. SDG&E also stated in its Plan that bilateral offers would be considered if they were competitive when compared

<sup>&</sup>lt;sup>5</sup> Pub. Utils. Code, Section §399.13(a)(5).

<sup>&</sup>lt;sup>6</sup> Pub. Utils. Code, Section §399.13.

<sup>&</sup>lt;sup>7</sup> SDG&E's 2009 and 2011 RPS Procurement Plans were approved by D.09-06-018 on June 8, 2009 and by D.11-04-030 on April 14, 2011.

<sup>&</sup>lt;sup>8</sup> In D.08-12-058, which approved SDG&E's Sunrise Powerlink, SDG&E committed to procuring 33 percent of its electricity from renewables by 2020.

against recent RFO offers and provide benefits to SDG&E customers. Last of all, SDG&E's Plan discussed utility plans to pursue renewable energy generation development partnerships and utility-owned resources.

The Sol Orchard PPAs are contracts for renewable generation that fit SDG&E's renewable resource needs identified in its 2011 RPS Plan. The proposed PPAs are for as-available generation pursuant to 25 year contracts from twenty-one renewable energy facilities that are expected to provide renewable energy deliveries beginning in December 2012 that will contribute towards SDG&E's RPS requirements.

The Sol Orchard PPAs are consistent with SDG&E's 2009 and 2011 RPS Procurement Plans, as approved by D.09-06-018 and D.11-04-030.

### Consistency with SDG&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. 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 2011 RPS Procurement Plan, SDG&E's LCBF bid evaluation includes a quantitative analysis and qualitative criteria. SDG&E's quantitative analysis or market valuation includes evaluation of price, time of delivery factors, transmission costs, congestion costs, and resource adequacy. SDG&E's qualitative analysis focuses on comparing similar bids across numerous factors, such as location, benefits to minority and low income areas, resource diversity, etc.

SDG&E negotiated the Sol Orchard PPAs bilaterally and therefore they did not compete directly with other RPS projects. In AL 2268-E, SDG&E explains that it evaluated the bilateral agreements using the same LCBF evaluation methodology it employs for evaluating bids from solicitations and that it compared Sol Orchard's evaluations against its recent 2011 RFO bids. Thus, SDG&E used its LCBF methodology to evaluate the Sol Orchard PPAs. See the "Cost Reasonableness" section of this resolution for a discussion of how the project compares to SDG&E's 2011 RPS shortlist, recent bilateral offers, and other contracts executed during the same timeframe. In addition, see Confidential Appendix A for SDG&E's LCBF evaluation of the project.

| 9 | See | §399. | 13( | a)(2    | 2)(A | , |
|---|-----|-------|-----|---------|------|---|
|   |     | 3     | – ( | ~ / \ – | -//  |   |

The Sol Orchard PPAs were evaluated consistent with the LCBF methodology identified in SDG&E's 2011 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, the Commission further refined these STCs in D.10-03-021, as modified by D.11-01-025.

The Sol Orchard PPAs include 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.

### **Independent Evaluator Review**

SDG&E retained independent evaluator ("IE") Jonathan Jacobs of PA Consulting Group to oversee SDG&E's bilateral negotiations with Sol Orchard and to evaluate the overall merits for CPUC approval of the PPAs. AL 2268-E included a public and confidential version of the independent evaluator's report.

The IE's conclusions on cost are of marginal value because the IE only compared the Sol Orchard PPAs to the 2009 RFO, and did not attempt to compare the PPAs to others negotiated and executed around the same time. That said, the IE contends that it was appropriate for SDG&E to negotiate these PPAs bilaterally rather than pushing the PPAs into the 2011 RFO. The IE agreed with SDG&E that pushing the PPAs into the 2011 RFO could potentially delay their CODs and jeopardize SDG&E's ability to utilize deliveries from the PPAs to meet its needs during the first compliance period under § 399.15(b).

The IE also followed the contract negotiations through weekly status updates from SDG&E and from reports to the Procurement Review Group ("PRG"). In the IE's opinion, these PPAs reflect fair negotiation. See the "Cost Reasonableness" and "Project Viability Assessment and Development Status" sections below for additional discussion regarding the IE's analysis of the PPAs and Confidential Appendix C for an excerpt of the conclusions from the IE report.

Consistent with D.06-05-039 and D.09-06-050, an independent evaluator oversaw SDG&E's negotiations with Sol Orchard.

#### Cost Reasonableness and Market Premium

The Sol Orchard projects were negotiated as bilateral contracts and executed in April 2011. Because the 2011 RFO short-list was not filed with the Commission until the fall of 2011, it is not appropriate to evaluate the Sol Orchard PPAs against the results of this competitive solicitation. Therefore, the proper contracts against which the Sol Orchard PPAs should be evaluated are other bilateral contracts executed during the same timeframe by SDG&E. Compared to these contracts, the price and market premium<sup>10</sup> of the Sol Orchard PPAs are marginally competitive. See Confidential Appendix A for a discussion on the price reasonableness of the Sol Orchard projects.

SDG&E provided additional information on February 2, 2012 in response to a data request from Energy Division staff on the expected cost of required distribution, reliability, and deliverability network upgrades for these twenty-one projects. Due to the wide range in the estimated cost of these upgrades from one project to the next, and the potential that some extraordinary upgrade costs could be borne by ratepayers in the future should the utility require these projects to be fully deliverable, the Commission is imposing a cap on total ratepayer costs for distribution and transmission upgrades (network and reliability) associated with these projects.

The Sol Orchard PPAs are to be modified to include an aggregate cap of \$13.5 million on the total costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability).

The Sol Orchard PPAs are marginally competitive compared with other bilateral contracts executed by SDG&E during the same timeframe.

Payments made by SDG&E under the Sol Orchard PPAs are fully recoverable in rates over the life of the PPA, subject to Commission review of SDG&E's administration of the PPAs.

#### **Portfolio Need**

<sup>&</sup>lt;sup>10</sup> The market premium calculation is the result of a market valuation which includes evaluation of bid price, time of delivery factors, transmission costs, congestion costs, and resource adequacy value.

compliance period.

In D.11-12-020, the Commission established the methodology for calculating retail seller's RPS requirements for three compliance periods through 2020. Accordingly, SDG&E must procure RPS-eligible resources equivalent to an average of 20% of retail sales for 2011-2013; 25% of retail sales by the end of 2016; and 33% of retail sales by 2020 and for each year thereafter. As a resource with expected commercial deliveries beginning in December 2012, SDG&E expects the Sol Orchard projects to contribute to its risk-adjusted need during the first compliance period, in addition to future deliveries contributing to its risk-adjusted need during the third compliance period.

There is inherent uncertainty in forecasting a utility's RPS need for new generation to meets its RPS compliance obligations through 2020. For example, a likely success rates for projects not yet online must be estimated; the rate at which utilities re-contract with expiring facilities must be estimated; climate can result in uncertain fluctuations in generation from hydro and other resources; and, Commission implementation of excess procurement provisions pursuant to § 399.13(a)(4)(B) has yet to occur. As a result, it is difficult to project with certainty a utility's future need for new renewable generation.

That said, when adjusting its RPS portfolio to account for a certain amount of project failure, SDG&E has a need for new renewable generation before the end of 2013 to meet its requirements during the first compliance period, and also has a need during the third compliance period. As such, SDG&E contends that the Sol Orchard projects will deliver renewable energy that will contribute toward meeting these portfolio needs given the CODs of these projects.

The Sol Orchard I projects are expected to generate, at most, 68 GWh in 2013 if they hit their December 31, 2012 COD. Given the inherent potential uncertainty surrounding near-term CODs for fifteen individual small projects such as these, it is unclear if these projects will materially contribute toward SDG&E's first compliance period need. Nevertheless, both the Sol Orchard I and Sol Orchard II

Projected generation from the Sol Orchard projects is expected to contribute to the need requirements of SDG&E's RPS portfolio during the third compliance

projects are expected to contribute to SDG&E's compliance need in the third

<sup>&</sup>lt;sup>11</sup> Risk-adjusted need is calculated by SDG&E by attributing a 60% project success-rate to projected deliveries from executed contracts for projects not yet under construction. The baseline to determine need is based on the utility's most recent bundled sales forecast through 2020. The calculation also assumes a 20% RPS requirement through 2013; a straight-line to 25% by 2016; and a straight-line to 33% in 2020.

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<u>period</u>. See Confidential Appendix A for a discussion on SDG&E's need requirements and portfolio fit.

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

SDG&E asserts that the Sol Orchard projects are viable and will be developed according to the terms and conditions in the PPAs. SDG&E bases its assertion on its evaluation of the viability of the projects 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.

The utility and the Independent Evaluator each assessed the Sol Orchard projects to be of higher viability than other comparable bilateral contracts executed by SDG&E around the same timeframe. It is also relevant to note that each of these comparable bilateral contracts executed around the same timeframe as the Sol Orchard PPAs, including those assessed to be of lower viability, have already secured CPUC approval. See Confidential Appendix A for a comparison of the viability assessments of the Sol Orchard projects to other comparable bilateral agreements.

Additionally, SDG&E provided the following information about the project's developer and the project's development status:

#### **Developer:**

Sol Orchard has completed several small-scale projects currently (with another 50 MW under development) for which it has procured photovoltaic technology of the type expected to be used with these projects from SolFocus, Inc. Sol Orchard is expected to partner with SolFocus, Inc. to provide the photovoltaic panels for these projects.

The developer expects to finance the projects through a combination of debt and equity. Additionally, the developer plans to utilize cash grants in lieu of investment tax credits (ITCs). The developer's plans to obtain financing and any other capital resources are confidential.

#### Technology:

The PPAs allow for the facilities to use tracking photovoltaic modules that will be wired in series to comprise 0.5 MW blocks. The module arrays will be ground-mounted and use dual-axis tracking mechanisms to track the sun's movement. However, the PPAs include no contractual requirement that any particular type of photovoltaic technology be installed for any of these projects.

#### Interconnection Status:

These twenty-one projects are interconnecting at the distribution level through the Wholesale Distribution Access Tariff (WDAT) process. Energy Division staff does not expect these projects to interconnect at the transmission-level and does not expect these projects to provide system Resource Adequacy. SDG&E, however, seeks to reserve the option of requiring these projects to become fully deliverable in the future if the projects can do so at a cost that is reasonable. SDG&E informed the Commission that the WDAT Interconnection Applications were completed in May 2011, and that several projects might incur significant network upgrade costs.

SDG&E addressed the issue of these potential network upgrade costs in response to a data request from the Energy Division on February 2, 2012. As a result of the information provided by SDG&E at that time, the Commission is requiring SDG&E to adopt a cap of \$13.5 million on total ratepayer costs for associated distribution and transmission upgrades (network and reliability) for these projects.

#### Site Control:

The developer has secured sufficient site control for these sites such that it is reasonable to expect the projects will meet the terms and conditions of their respective PPAs. For more information, refer to the "Project Viability" section of Confidential Appendix A.

#### Permitting Status:

Securing the requisite permits is not expected to impact the ability of these projects to meet the terms and conditions of their respective PPAs. For more information, refer to the "Project Viability" section of Confidential Appendix A.

It is reasonable to expect the Sol Orchard projects to meet the terms and conditions of their respective PPAs. Confidential Appendix A includes information about other project development milestones that are confidential.

# Compliance with the Interim Greenhouse Gas Emissions Performance Standard

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

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>13</sup>

The Sol Orchard PPAs meet the conditions for EPS compliance because they are for intermittent generation with a capacity factor less than 60 percent.

### **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. SDG&E asserts that the Sol Orchard PPAs were discussed at regularly-scheduled PRG meetings in August 2010, January 2011, February 2011, and April 2011.

<u>Pursuant to D.02-08-071, SDG&E's Procurement Review Group participated in the review of the Sol Orchard PPAs.</u>

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

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

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

<sup>&</sup>lt;sup>14</sup> SDG&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.

Section 399.13(b) requires that the commission establish "minimum quantities of eligible renewable energy resources to be procured through contracts of at least 10 years' duration." Because the Sol Orchard PPAs are greater than 10 years in length, the PPAs may be construed as counting toward the minimum quantity requirements that the Commission has not yet established in R.11-05-005.

# Backcountry Against Dumps ("BAD") Protested the Sol Orchard PPAs over Cost Concerns and that Protest is Denied.

BAD, an all-volunteer non-profit, filed a timely protest to SDG&E's AL 2268-E on July 26, 2011. The protest argued that the PPAs should be rejected because they are priced above the Market Price Referent (MPR); because many of the projects pose a fire hazard risk due to their site locations; that significant fossil-generation will be required to accompany new renewable generation to promote grid stability; and, that SDG&E unnecessarily redacted information from the public filing of its Advice Letter that is not confidential.

SDG&E's response to the protest contends that most of the issues raised by this protest are beyond the scope of review by the Commission, except for the concern that these PPAs are priced above MPR.

The Commission agrees with SDG&E that the only issue within the scope of this resolution is whether the PPAs should be rejected because their price is above the MPR. While these PPAs are priced above the relevant MPR, this does not form a basis upon which the Commission would automatically reject the PPAs. The MPR is a price benchmark; it is not a cost reasonableness mechanism. See "Cost Reasonableness and Market Premium" section above addressing the cost reasonableness of the Sol Orchard PPAs. Because the protests do not support their argument that the price of the PPAs is unreasonable, the protest is denied.

BAD's protest seeking rejection of AL 2268-E because the Sol Orchard PPAs price exceeds the MPR is denied because the protest does not demonstrate that the price is unreasonable.

#### **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.

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

Pursuant to Pub. Util. Code § 399.25, 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 California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.<sup>15</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>16</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.

<sup>&</sup>lt;sup>15</sup> See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.

<sup>&</sup>lt;sup>16</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 Sol Orchard PPAs are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
- 2. The Sol Orchard PPAs are consistent with SDG&E's 2009 and 2011 RPS Procurement Plans, as approved by D.09-06-018 and D.11-04-030.
- 3. The Sol Orchard PPAs were evaluated consistent with the LCBF methodology identified in SDG&E's 2011 RPS Procurement Plan.
- 4. The Sol Orchard PPAs include 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 SDG&E's negotiations with Sol Orchard.
- 6. The Sol Orchard PPAs should be modified to include an aggregate cap of \$13.5 million on the total costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability).
- 7. The Sol Orchard PPAs are marginally competitive with other bilateral contracts executed by SDG&E during the same timeframe.
- 8. Payments made by SDG&E under the Sol Orchard PPAs are fully recoverable in rates over the life of the PPA, subject to Commission review of SDG&E's administration of the PPAs.

- 9. Projected generation from the Sol Orchard projects is expected to contribute to the need requirements of SDG&E's RPS portfolio during the third compliance period.
- 10. It is reasonable to expect the Sol Orchard projects to meet the terms and conditions of their respective PPAs.
- 11. The Sol Orchard PPAs meet the conditions for EPS compliance because they are for intermittent generation with a capacity factor less than 60 percent.
- 12. Pursuant to D.02-08-071, SDG&E's Procurement Review Group participated in the review of the Sol Orchard PPAs.
- 13. BAD's protest for rejection of AL 2268-E based on the Sol Orchard PPAs price exceeding the MPR is denied because the protest does not demonstrate that the price is unreasonable.
- 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. Procurement pursuant to the Sol Orchard power purchase agreements is procurement from eligible renewable energy resources for purposes of determining SDG&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.11-12-020 and D.11-12-052, or other applicable law.
- 16. The immediately preceding finding shall not be read to allow generation from a non-RPS eligible renewable energy resource under this power purchase agreement to count towards an RPS compliance obligation. Nor shall that finding absolve SDG&E of its obligation to enforce compliance with this power purchase agreement.
- 17. The Sol Orchard power purchase agreements should be approved with the modifications discussed above.
- 18. AL 2268-E should be approved effective today with modifications to cap overall costs that ratepayers reimburse to the seller at \$13.5 million for distribution and transmission upgrades (network and reliability) as discussed above.

## **THEREFORE IT IS ORDERED THAT:**

- 1. San Diego Gas & Electric Company's Advice Letter 2268-E, requesting Commission review and approval of fifteen (15) power purchase agreements with Sol Orchard San Diego I LLC through Sol Orchard San Diego 4 LLC, Sol Orchard San Diego 6 LLC through Sol Orchard San Diego 10 LLC (the Sol Orchard I PPAs), and approval of six (6) power purchase agreements with Sol Orchard San Diego 12 LLC through Sol Orchard San Diego 23 LLC (the Sol Orchard II PPAs), is approved with modifications to cap ratepayer costs for distribution and transmission upgrades (network and reliability) at \$13.5 million.
- 2. Within 30 days of the effective date of this resolution, San Diego Gas & Electric must file a Tier 1 advice letter containing the PPAs approved herein with modifications that impose an aggregate cap of \$13.5 million on the costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability) for the Sol Orchard projects.
- 3. San Diego Gas & Electric must file an annual report with the Commission to demonstrate compliance with this \$13.5 million cap on the costs that ratepayers reimburse to the seller for distribution and transmission upgrades (network and reliability) as imposed by this resolution. San Diego Gas & Electric must comply with this obligation through December 31, 2016, three years beyond the expected commercial operation date for the Sol Orchard II projects.

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 April 19, 2012; the following Commissioners voting favorably thereon:

PAUL CLANON
Executive Director

# **Confidential Appendix A**

Evaluation Summary of the Sol Orchard PPAs

[REDACTED]

# **Confidential Appendix B**

**Contract Terms & Conditions** 

[REDACTED]

# **Confidential Appendix C**

Independent Evaluator Report's Conclusion
[REDACTED]