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PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

ID #10764  
RESOLUTION E-4439  
November 10, 2011

REDACTED

R E S O L U T I O N

Resolution E-4439. San Diego Gas & Electric Company requests approval of five renewable energy power purchase agreements, as amended, with LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC and an Option to purchase additional capacity from Soitec Solar Development, LLC

PROPOSED OUTCOME: This Resolution approves San Diego Gas & Electric Advice Letters AL 2270-E and AL 2270-E-A with modifications. This Resolution approves cost recovery for the long-term renewable energy power purchase agreements, as amended, between San Diego Gas & Electric Company and LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC. without modifications. This Resolution also approves the Option between San Diego Gas & Electric Company and Soitec Solar Development, LLC and requires any power purchase agreements executed as a result of the Option to be filed by Tier 2 Advice Letter.

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

By Advice Letter 2270-E filed on July 14, 2011 and Advice Letter 2270-E-A on September 23, 2011.

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**SUMMARY**

**San Diego Gas & Electric Company's renewable energy power purchase agreements with LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC comply with the Renewables Portfolio Standard procurement guidelines and are approved without modification**

San Diego Gas & Electric Company (SDG&E) filed Advice Letter 2270-E on July 14, 2011, requesting California Public Utilities Commission (Commission) review and approval of five 25-year renewable energy power purchase agreements (PPAs) between SDG&E and LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC. On September 23, 2011, SDG&E filed Advice Letter 2270-E-A requesting approval of amendments to all five PPAs that reduce the price of the PPAs. In addition, AL 2270-E-A, requests approval of an Option for the right, but not the obligation, for SDG&E to purchase additional concentrating photovoltaic capacity from the developer, Soitec Solar Development, LLC.

This resolution approves the LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC PPAs without modification. SDG&E's execution of these bilateral PPAs, as amended, is consistent with SDG&E's 2011 RPS Procurement Plan, which the Commission approved in Decision 11-04-030.

Deliveries under the LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC PPAs, as amended, are reasonably priced and fully recoverable in rates over the life of the PPAs, as amended, subject to Commission review of SDG&E's administration of the PPAs.

The following table provides a summary of the PPAs:

<b>Generating Facility</b>	<b>Technology Type</b>	<b>Term (Years)</b>	<b>Capacity (MW)</b>	<b>Energy (GWh/year)</b>	<b>Online Date</b>	<b>Location</b>
LanEast	Concentrating PV	25	12 - 22	50.7	10/31/2014	Boulevard, CA
LanWest	Concentrating PV	25	3.5 - 6.5	12.7	2/28/2014	Boulevard, CA
Desert Green	Concentrating PV	25	3.5 - 6.5	12.7	2/28/2014	Borrego Springs, CA
Rugged	Concentrating PV	25	60 - 80	202.9	12/31/2014	Boulevard, CA
Tierra del Sol	Concentrating PV	25	35 - 45	114	12/31/2014	Boulevard, CA
			114 - 160	280 - 393		

This resolution also approves the Option between SDG&E and Soitec Solar Development, LLC, but the Commission modifies AL 2270-E-A. Specifically, SDG&E is required to file any PPAs executed as a result of the Option as Tier 2 Advice Letters, instead of Tier 1, as requested by San Diego Gas & Electric in AL 2270-E-A.

## **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 (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 <http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm> and <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

## **NOTICE**

Notice of Advice Letters 2270-E and 2270-E-A was made by publication in the Commission's Daily Calendar. SDG&E states that copies of the Advice Letters were mailed and distributed in accordance with Section IV of General Order 96-B.

## **PROTESTS**

SDG&E Advice Letter 2270-E was timely protested by the Division of Ratepayer Advocates (DRA) and collectively by Backcountry Against Dumps (BAD), The Protect Our Communities Foundation (POC), and the East County Community Action Coalition (ECCAC) on August 3, 2011.

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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> SB 2 (1x) becomes effective on December 10, 2011; 90 days after the close of the Legislatures 2011 Extraordinary Session.

<sup>4</sup> See SB 2 (1x) § 399.15(b)(2)(B).

On August 10, 2011, SDG&E responded to the protests.

No protests were filed in response to AL 2270-E-A.

## **DISCUSSION**

**San Diego Gas & Electric Company requests approval of five renewable energy power purchase agreements with LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC.**

On July 14, 2011, SDG&E filed Advice Letter (AL) 2270-E requesting Commission approval of five long-term PPAs with LanEast Solar Farm, LLC (LanEast), LanWest Solar Farm, LLC (LanWest), Desert Green Solar Farm, LLC (Desert Green), Rugged Solar LLC (Rugged), and Tierra Del Sol Solar Farm, LLC (Tierra Del Sol). On September 23, 2011, SDG&E filed AL 2270-E-A requesting Commission approval of amendments to the five PPAs and an Option between SDG&E and Soitec Solar Development, LLC (Soitec). The amendments reduce the prices of the PPAs and modify several definitions in the PPAs. Pursuant to the Option, SDG&E has the right to purchase additional concentrating photovoltaic (CPV) capacity from Soitec. AL 2270-E-A also requested approval of a Form PPA that would be used for purchases under the Option and the subsequent approval of the resulting PPAs by Tier 1 advice letter(s).

The LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs concern generation from five new solar CPV facilities located in Boulevard and Borrego Springs, California. Table 1 lists the location and points of interconnection for the five projects.

**Table 1: Location and Point of Interconnection of the Soitec Projects**

<b>Project</b>	<b>Street Address</b>	<b>Point of Interconnection</b>
LanEast	2172 McCain Valley Rd Boulevard, CA 91905	Boulevard Substation 69kV bus
LanWest	40730 Old Highway 80 Boulevard, CA 91905	Boulevard Substation 12 kV bus
Desert Green	2375 Di Giorgio Rd Borrego Springs, CA 92114	Borrego Substation 12 kV bus
Rugged	2553 McCain Valley Rd Boulevard, CA 91905	Boulevard Substation 69kV bus
Tierra Del	796 Tierra del Sol Rd	Loop station on the 138 kV

Sol	Boulevard, CA 91905	Boulevard to ECO line
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The facilities will use Soitec's Concentrix™ CPV technology. The facilities are expected to come online in 2014. To support the projects, Soitec, the developer, will build a new CPV panel assembly manufacturing plant in the San Diego region to manufacture its proprietary CPV modules.<sup>5</sup> The plant will have an annual production capacity of 200 MW. It is projected to generate up to 450 direct jobs and more than 1,000 indirect jobs generating \$22 million in annual payroll and \$23 million in annual sales tax revenue.<sup>6</sup>

The Commission's approval of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs will authorize SDG&E to accept future RPS-eligible generation that will contribute towards SDG&E's 33 percent RPS mandate. The LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol projects are expected to generate annual RPS-eligible deliveries of approximately 392.9 gigawatt-hours (GWh). The Commission's approval of the Option and Form PPA will authorize SDG&E to enter, at its option, into future PPAs with Soitec for future RPS-eligible generation that will come online in 2016 and also contribute towards SDG&E's 33 percent RPS mandate.

**SDG&E requests that the Commission issue a resolution that:**

1. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, are consistent with SDG&E's CPUC-approved RPS Plan and procurement from the Proposed Agreement will contribute towards SDG&E's RPS procurement obligation.
2. SDG&E's entry into the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, the Option, and the Form PPA(s) are reasonable; therefore, the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, and the Option with the Form PPA(s) are approved in their entirety and all costs of the purchase associated with the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, and the Option with Form PPA(s) including for energy, green attributes, and resource adequacy, are fully recoverable in rates over the life of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, and the Option with PPA(s), subject to Commission

<sup>5</sup> Soitec press release, March 10, 2011: <http://www.soitec.com/en/news/press-releases/soitec-announces-major-us-cpv-solar-power-project-623/>

<sup>6</sup> AL 2270-E, p. 16

review of SDG&E's administration of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs.

3. Generation procured pursuant to the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, and Option with Form PPA(s) constitutes generation from an eligible renewable energy resource 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 LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, and Option with Form PPA(s) will contribute to SDG&E's minimum quantity requirement established in D.07-05-028.

We will address SDG&E's requests in two parts. First, we will address its request for approval of the five PPAs. Second, we will address SDG&E's request for approval of the Option with Form PPA and request for approval of any resulting PPAs by a Tier 1 advice letter.

**Energy Division Evaluated the LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs on the following criteria:**

- Consistency with bilateral contracting rules
- Consistency with SDG&E's 2011 RPS Procurement Plan
- Consistency with SDG&E's Least-Cost, Best-Fit requirements
- Consistency with RPS standard terms and conditions
- Independent Evaluator review
- Cost reasonableness
- Cost containment
- 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 SDG&E, the parties pursued bilateral negotiations beginning in October 2010. At that time the most recent RPS solicitation had been a year earlier and timing of the next RPS solicitation was unknown. SDG&E states that waiting for the next solicitation would have delayed the project's deliveries to SDG&E.

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, the above market costs will not be applied to SDG&E's RPS cost limitation, and the PPAs 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 in subsequent sections of this resolution, the LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs, as amended, were compared to other RPS offers received in SDG&E's 2011 RPS solicitation, recently executed agreements, and recently approved contracts; the proposed agreements were reviewed by SDG&E's Procurement Review Group; and an independent evaluator oversaw the evaluation of the projects and negotiation of the PPAs.

The LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs, as amended, are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.

### **Consistency with SDG&E's 2011 RPS Procurement Plan**

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, 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>7</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>8</sup> The Commission reviews the results to verify that the utility conducted its solicitation according to its Commission-approved procurement plan.<sup>9</sup>

<sup>7</sup> Pub. Utils. Code, Section §399.14(a)(3).

<sup>8</sup> Pub. Util. Code, Section §399.14.

<sup>9</sup> SDG&E's 2011 RPS Procurement Plan was approved by D.11-04-030 on April 14,

In SDG&E's 2011 RPS Plan, SDG&E expressed a commitment to contract in excess of its mandated annual procurement targets and goal of 33 percent renewables by 2020.<sup>10</sup> SDG&E's 2011 RPS Plan 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 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 LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs are contracts for renewable generation that fit SDG&E's identified renewable resource needs. The proposed LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs are for as-available generation pursuant to five 25 year contracts from five renewable energy facilities that are expected to provide renewable energy deliveries beginning in 2014 that will contribute towards SDG&E's RPS requirement in the second compliance period. While SDG&E has nominal need for RPS generation in the second compliance period, the long-term contracts will also help SDG&E meet its longer term needs in the third compliance period.

The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, are consistent with SDG&E's 2011 RPS Procurement Plan, as approved by 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.<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

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2011.

<sup>10</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.

<sup>11</sup> See §399.14(a)(2)(B)

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 LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs bilaterally and therefore they did not compete directly with other RPS projects. In AL 2270-E and AL 2270-E-A, SDG&E explains that it evaluated the bilateral agreement using the same LCBF evaluation methodology it employs for evaluating bids from solicitations. Thus, SDG&E used its LCBF methodology to evaluate the amended LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs. See the "Cost Reasonableness" section of this Resolution for a discussion of how the projects compare to SDG&E's 2011 RPS solicitation, recent bilateral offers, and recently approved contracts. In addition, see Confidential Appendix A for SDG&E's LCBF evaluation of the project.

The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, were evaluated consistent with the LCBF methodology identified in SDG&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, some 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.

The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, as amended, 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 Soitec and to evaluate the overall merits for CPUC approval of the PPAs, as amended. AL 2270-E and 2270-E-A included a public and confidential independent evaluator's report. In the IE report, the IE states that he determined the negotiations between SDG&E

and Soitec were fair and that Soitec was not given preferential treatment over bidders participating in SDG&E's RPS solicitation. See the "Cost Reasonableness" and "Project Viability Assessment and Development Status" sections below for additional comments from the IE report and Confidential Appendix B for an excerpt of the IE report.

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

### **Cost Reasonableness**

The Commission's reasonableness review for RPS PPA costs includes a comparison of the proposed PPA's value and price. A PPA's value is determined by the IOUs LCBF valuation and it is compared along with the PPA price to RPS offers received in recent RPS solicitations, recent bilateral offers, and recently approved contracts. In the IE report, the IE states that based on his price-only comparison that the amended PPAs were "out of the money" when compared to bids of similar technology and online dates from SDG&E's 2011 RPS solicitation.<sup>12</sup> In addition to a price-only comparison, the IE also performed a market value comparison and found that on a market value or LCBF basis the projects compared favorably to SDG&E's 2011 RPS shortlist.

Based on the Commission's analysis of the PPAs' value and prices and the confidential analysis provided by SDG&E in AL 2270-E and AL 2270-E-A, the Commission determines the PPAs' costs are reasonable. The amended PPAs are reasonable because their market valuation is comparable to the SDG&E's 2011 RPS solicitation and other comparable contracts and the add potential for long-term technology diversity. (See Confidential Appendix A for a detailed discussion of the contractual pricing terms.)

The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs reasonably compare to the results of SDG&E's 2011 RPS solicitation and other comparable contracts.

Payments made by SDG&E under the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs are fully recoverable in rates over the life of the PPAs, subject to Commission review of SDG&E's administration of the PPAs.

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<sup>12</sup> Report of the Independent Evaluator on the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol contracts relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO) -, Jonathan M. Jacobs, (June 28, 2011)

## **Cost Containment**

Pursuant to statute, the Commission calculates a market price referent (MPR) to assess whether a proposed PPA has above-market costs.<sup>13</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>14</sup> Contracts that meet certain criteria are eligible for above-MPR funds (AMFs).<sup>15</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>16</sup>

Based on 2014 commercial online dates for the LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs, the 25-year PPAs exceed the 2009 MPR. However, the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs do not meet the eligibility criteria for AMFs because they are not the result of a solicitation.

Since SDG&E has already exhausted its AMFs, it is voluntarily entering into the PPAs at a price that exceeds the applicable market price referent as permitted by Public Utilities Code § 399.15(d).

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

SDG&E asserts that the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol projects will be developed according to the terms and conditions in the PPAs. SDG&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, SDG&E provided the following information about the project's developer and development status.

<sup>13</sup> See Pub. Util. Code § 399.15(c).

<sup>14</sup> See Pub. Util. Code §399.15.

<sup>15</sup> Under Resolution E-4199, a PPA between a utility and a developer must meet the following requirements for the utility to achieve AMFs 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>16</sup> See Pub. Util. Code § 399.15(d).

### Developer experience

Soitec Solar Development, LLC is the developer of the project. The Soitec development team has various experiences in developing utility scale solar projects in other states and other countries. Members of the team also have experience in wholesale power generation, engineering, construction of solar plants, real estate development, and project financing.

### Technology and Resource quality

The facilities will use Soitec's Concentrix CPV technology. The modules consist of a "triple-junction" solar cell and uses lenses to focus the sunlight onto the solar cells to increase the overall system efficiency. Modules will be installed in 29 kW two-axis trackers and the trackers will be wired in series to comprise 1.26 MW blocks each with its own pair of 630 kW inverters. Commercial installations are located in Spain, South Africa, and the State of New Mexico.

Based on the average daily solar insolation of the proposed project area, SDG&E describes the project site as being located in a region with an excellent long-term solar energy resource.

### Site control and permitting status

The proposed facilities are to be located on private lands for which Soitec has secured full site control through options to purchase and lease. Soitec is pursuing permits required for the projects' development and gen-ties. In addition, Soitec is pursuing CEC Pre-Certification for the facilities. All permits are expected to be obtained in a timely manner to achieve the conditions precedents in the PPAs.

### Interconnection and transmission

Table 1 (page 5) lists the points of interconnection for the five projects. The projects are in the CAISO Phase I Interconnection Study and/or SDG&E WDAT interconnection study process.

### Financing Plan

The project is expected to be financed through a combination of debt and equity. Based on the expected 2014 online date, the projects will be eligible for the Investment Tax Credit. The 1603 grant is not intended to be utilized.<sup>17</sup>

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<sup>17</sup> The purpose of the 1603 Program (Payments for Specified Energy Property in Lieu of

In the IE report, the IE expressed some concern regarding the viability of the projects due to dependence on the successful development of a manufacturing facility. The Commission agrees that since the projects are depending on a relatively new technology with very limited commercial applications that there is greater viability risk. The proposed PPAs, however, protect the ratepayers from the risk because the ratepayers do not pay for development costs, but only costs associated with generation from the developed facilities. Additionally, there are long-term benefits to adding technology diversity to the overall portfolio of technologies that can be used meet the State's renewable generation requirements.

### **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>18</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>19</sup>

The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs meet the conditions for EPS compliance because they are for intermittent generation with a capacity factor less than 60 percent.

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Tax Credits) is to reimburse eligible applicants for a portion of the cost of installing specified energy property used in a trade or business or for the production of income.

<sup>18</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>19</sup> D.07-01-039, Attachment 7, p. 4

<sup>20</sup> SDG&E's PRG includes representatives of the Union of Concerned Scientists, the

### **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>20</sup> SDG&E asserts that the Soitec PPAs were discussed at the December 17, 2010, January 21, 2011, February 18, 2011, May 20, 2011, and September 16, 2011 PRG meetings.

Pursuant to D.02-08-071, SDG&E's Procurement Review Group participated in the review of the LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs.

### **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>21</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 new facilities, delivering pursuant to long-term contracts, the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs will contribute to SDG&E's minimum quantity requirement established in D.07-05-028.

### **DRA's recommends rejection of AL 2270-E**

DRA recommends that the Commission either reject AL 2270-E or SDG&E negotiate price reductions. DRA argues that the PPAs' prices and transmission upgrade costs are too high compared to other market alternatives, especially when maximum transmission costs are considered. DRA argues that there is no reason to approve contracts priced above the MPR given the maturity of the renewable market and current market prices.

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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>21</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."

In SDG&E's reply to DRA's protest, SDG&E recommends that the Commission deny DRA's protest. SDG&E argues that while the PPAs do have above-MPR costs, that is common for renewable energy projects. In addressing DRA's concern about how the PPAs compare whether using TRCRs or transmission cost limits, SDG&E asserts that the use of TRCRs in its LCBF valuation is consistent with its approved LCBF methodology and that all transmission costs are unknown until the CAISO completes the interconnection and deliverability studies.

On September 23, 2011, SDG&E filed AL 2270-E-A to request approval of amendments to the five PPAs which reduce the PPAs' prices. The Commission has reviewed and evaluated the five PPAs, as amended. As noted above and in Confidential Appendix A, the five PPAs were evaluated consistent with SDG&E's approved LCBF methodology and are competitive relative to SDG&E's recent solicitation, recent bilateral offers, and recently approved contracts. Therefore, DRA's protest is denied.

#### **BAD, POC, and ECCAC recommends rejection of AL 2270-E**

BAD, POC, and ECCAC raise a number of issues in their protest including confidentiality and project viability. BAD, POC, and ECCAC argue that much of the information in AL 2270-E that is claimed as confidential by SDG&E is not proprietary and should be fully disclosed. Additionally, BAD, POC, and ECCAC argue that there are project viability issues based on the technology, project financing, and project siting. BAD, POC, and ECCAC also assert that the proposed tracker has not been deemed eligible and that Soitec has not received government funding or a Department of Energy loan guarantee. Furthermore, BAD, POC, and ECCAC argue that major use permits have not been granted and that they have other siting concerns such as environmental impacts, fire safety, and local zoning. Lastly, BAD, POC, and ECCAC recommend that increased distributed generation should be pursued to meet future energy needs in California and the United States instead of the proposed PPAs and similar projects.

In SDG&E's reply to BAD, POC, and ECCAC's protest, SDG&E recommends that the Commission deny their protest. SDG&E argues that BAD, POC, and ECCAC's protest has nothing to do with the Commission's approval of the proposed LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs. SDG&E asserts that the topics are outside the scope of the advice letter approval process.

#### Confidentiality

In D.06-06-066, as modified by D.07-05-032, the Commission determined 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. Specifically, information such as price, contract terms, and bid evaluation is considered confidential information pursuant to D.06-06-066, as modified by D.07-05-032. Pursuant to D.06-06-066, SDG&E correctly redacted information in AL 2270-E and 2270-E-A.

### Viability

BAD, POC, and ECCAC raise project viability concerns regarding the proposed Concentrix technology because it is not on the Go Solar California's "List of Other Eligible Solar Electric Generating Technologies." The Go Solar California program is a customer-side distributed generation program and their list of eligible technologies is limited to those used for distributed generation and the associated Go Solar California incentive programs. The listing or non-listing of a technology on the Go Solar California's List of Other Eligible Solar Electric Generating Technologies does not determine if a project will be RPS-eligible. Certification of facilities as RPS-eligible is done by the CEC. As stated above in this resolution and in AL 2270-E, Soitec is pursuing and expects pre-certification from the CEC.

BAD, POC, and ECCAC is also concerned with the financing of the project in relation to government funding. In the protest, BAD, POC, and ECCAC correctly note that Soitec and Concentrix have not received a DoE loan guarantee. They further make statements questioning whether or not Soitec and Concentrix will receive any government funding in the future based on other whether other projects and companies have or have not received funding. In AL 2270-E, SDG&E states that it anticipates that the projects will be eligible for the investment tax credit and "the 1603 grant is not intended to be utilized."<sup>22</sup> However, in AL 2270-E and AL 2270-E-A SDG&E did not make any claims that Soitec was pursuing any funding from the U.S. DoE. Thus, the project's viability is not dependent on the receipt of government funding.

Additionally, BAD, POC, and ECCAC note concerns regarding the actual siting of the projects related to the environmental impacts, fire hazards and consistency with local zoning. As previously noted by this Commission, the Commission's review of PPAs is confined to approval of costs pursuant to a PPA. Further, Commission approval of the PPA does not exempt the project from compliance with all applicable environmental laws nor does it limit the review of project alternatives should future environmental reviews of the development projects

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<sup>22</sup> AL 2270-E, p. 29

require such analysis. Thus, BAD, POC, and ECCAC concerns are outside the scope of AL 2270-E and 2270-E-A.

#### Distributed Generation Procurement

Lastly, BAD, POC, and ECCAC recommend increased distributed generation at urban demand centers and in rural communities should be developed to meet energy needs instead of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol projects. The amount and/or location of distributed generation in California is a policy issue that is outside the scope AL 2270-E or AL 2270-E-A. The Commission encourages BAD, POC, and ECCAC to participate in the distributed generation and RPS proceedings where these policy issues are being addressed.

Therefore, for the reasons stated above, BAD, POC, and ECCAC's protest is denied.

#### **SDG&E requests approval of an Option with Form PPA and request for approval of any resulting PPAs by a Tier 1 advice letter**

In AL 2270-E-A, in addition to requesting approval of amendments to the LanEast, LanWest, Desert Green, Rugged, Tierra Del Sol PPAs, SDG&E also requested approval of an Option with Soitec. Pursuant to the Option, SDG&E may elect by the end of 2012 to purchase additional CPV capacity from Soitec at PV prices competitive with the 2011 RPS solicitation. SDG&E states that when the Option is combined with the re-pricings of the original five PPAs, the aggregate price is below the current MPR. See Confidential Appendix A for confidential details of the Option's terms.

In AL 2270-E-A, SDG&E also requested approval of a Form PPA that would be used for PPAs executed as a result of the Option. Furthermore, SDG&E explained that it would consult with its PRG to discuss its portfolio requirements prior to any execution of PPAs pursuant to the Option. SDG&E stated it would then request approval of the resulting executed PPA(s) by Tier 1 advice letter(s).

The Commission agrees with SDG&E that the Option PPAs are currently competitively priced with its most recent RPS solicitation. Additionally, the Form PPA contains all of the required standard terms and conditions and SDG&E will consult with the PRG before entering into any additional PPAs. Therefore, the Option, using the Form PPA, is reasonable. The approval of the subsequent PPAs will require staff disposition regarding SDG&E's RPS generation need; thus, SDG&E's request for approval by Tier 1 advice letter is rejected. Therefore, AL 2270-E-A, is approved with modifications such that SDG&E is required to file

a Tier 2 advice letter filing instead of a Tier 1 when requesting approval of any PPAs that result from the Option.

### **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 California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.<sup>23</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>24</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>23</sup> See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.

<sup>24</sup> See, e.g. D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

### **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.

### **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 LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs are consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
2. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs are consistent with SDG&E's 2011 RPS Procurement Plan, as approved by D.11-04-030.
3. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs were evaluated consistent with the least-cost best-fit methodology identified in SDG&E's RPS Procurement Plan.
4. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol 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 amended by D.11-01-025.

5. Consistent with D.06-05-039 and D.09-06-050, an independent evaluator oversaw SDG&E's RPS procurement process.
6. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs compare reasonably to the results of SDG&E's 2011 solicitation, recently executed contracts, and recently approved contracts.
7. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs prices exceed the applicable 2009 market price referent.
8. SDG&E is voluntarily entering into the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs at prices that exceed the applicable market price referent as permitted under the Public Utilities Code §399.15.
9. Payments made by SDG&E under the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs are fully recoverable in rates over the life of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs, subject to Commission review of SDG&E's administration of the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs.
10. SDG&E asserts that the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol projects are viable and will provide renewable energy according to the terms and conditions in the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs.
11. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol 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 LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs.
13. The LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs will contribute to SDG&E's minimum quantity requirement established in D.07-05-028.
14. DRA's protest is denied because the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs were evaluated consistent with SDG&E's least-cost best-fit methodology and compare reasonably to the results of SDG&E's 2011 solicitation, recently executed contracts, and recently approved contracts.
15. BAD, POC, and ECCAC's protest is denied because SDG&E redacted confidential information consistently with D.06-06-066, as modified by D.07-05-

032, and BAD, POC, and ECCAC's project siting concerns are outside the scope of AL 2270-E and AL 2270-E-A.

16. The Option using the Form PPA between SDG&E and Soitec is reasonable.
17. SDG&E is required to file a Tier 2 advice letter instead of a Tier 1 advice letter to allow for staff review of SDG&E's RPS need before disposition.
18. Procurement pursuant to the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol PPAs 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.03-06-071 and D.06-10-050, or other applicable law.
19. 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 SDG&E of its obligation to enforce compliance with these PPAs.
20. 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.
21. AL 2270-E and 2270-E-A should be approved effective today with modification.

**THEREFORE IT IS ORDERED THAT:**

1. San Diego Gas & Electric Company's Advice Letters 2270-E and 2270-E-A, requesting Commission review and approval of power purchase agreements, as amended, with LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC, are approved with modification.
2. San Diego Gas & Electric Company shall file any requests for Commission approval of power purchase agreements that are executed as the result of the Option agreement between San Diego Gas & Electric Company and Soitec Solar Development, LLC as Tier 2 advice letters.

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 November 10, 2011; the following Commissioners voting favorably thereon:

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PAUL CLANON  
Executive Director

## **Confidential Appendix A**

Evaluation the LanEast Solar Farm, LLC, LanWest Solar Farm, LLC, Desert Green Solar Farm, LLC, Rugged Solar LLC, and Tierra Del Sol Solar Farm, LLC PPAs

[Redacted]

## **Confidential Appendix B**

Excerpt from Independent Evaluator's Report  
regarding SDG&E's PPAs with LanEast, LanWest,  
Desert Green, Rugged, and Tierra Del Sol<sup>25</sup>

[Redacted]

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<sup>25</sup> Confidential Appendix B to Advice Letter 2270-E-A, Report of the Independent Evaluator on the LanEast, LanWest, Desert Green, Rugged, and Tierra Del Sol relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO) September 20, 2011