



Clay Faber - Director  
Regulatory Affairs  
8330 Century Park Court  
San Diego, CA 92123-1548

Tel: 858-654-3563  
Fax: 858-654-1788  
CFaber@semprautilities.com

March 5, 2012

**ADVICE LETTER 2332-E  
(U 902-E)**

**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

**SUBJECT: REQUEST FOR APPROVAL OF A RENEWABLE POWER PURCHASE  
AGREEMENT WITH 82LV 8ME, LLC FOR THE MOUNT SIGNAL 1 SOLAR  
FARM**

**I. INTRODUCTION**

**A. PURPOSE OF THE ADVICE LETTER**

San Diego Gas & Electric Company ("SDG&E") seeks approval from the California Public Utilities Commission (the "Commission" or the "CPUC") of a Power Purchase Agreement (PPA) with 82LV 8ME, LLC ("Mount Signal I"). The Project was offered into, and shortlisted, in SDG&E's 2011 Renewables RFO. This proposed PPA between SDG&E and Mount Signal I (the "Proposed Agreement") is for a 25-year term and involves delivery of 200 MW of solar energy from a photovoltaic plant to be constructed on previously disturbed land west of the City of Calexico located in Imperial County, California. The Proposed Agreement establishes a formal commercial online dates for the various stages as follows: with 100 MW of deliveries to begin by June 30, 2013 and up to 150 MW by September 30, 2013 and no less than 150 MW and no more than 200 MW by December 31, 2013. This project will advance SDG&E's RPS procurement goals. This project will be a contributor in fulfilling SDG&E's need to meet its 20% RPS requirements in Compliance Period I and toward our RPS requirements in Compliance Periods II and III.

**B. SUBJECT OF THE ADVICE LETTER**

1. **PROJECT NAME:** Mount Signal I Solar ("Project").
2. **TECHNOLOGY (INCLUDING LEVEL OF MATURITY):** The proposed facility will utilize standard photovoltaic ("PV") technology incorporating solar PV modules wired in series to comprise 1 MW blocks. These modules may be sourced from multiple panel suppliers in order to ensure achievement of target project costs and minimize single-source risks. Final project engineering and layout will be optimized based on panel supplier selection. PV technology has a 30+ year history of power generation and PV solar panels typically come with a 20 to 25-year warranty.
3. **GENERAL LOCATION AND INTERCONNECTION POINT:** The project will be located on previously disturbed land west of Calexico which is located in western Imperial County, California. The project will interconnect to the CAISO grid at the IV Substation which is part of SDG&E's transmission system. The IV Substation will be interconnected to

SDG&E's Sunrise Powerlink. The energy from the project will help fulfill SDG&E's commitment to deliver up to 495 GWh annually of renewable energy over the Sunrise Powerlink. The general area around the project and the IV Substation is rich with existing and proposed renewable energy projects.

**4. OWNER(S) / DEVELOPER(S):**

A. NAME(S): THE MOUNT SIGNAL I SOLAR FARM (THE PROJECT) IS OWNED BY 82LV 8ME, LLC. THE PROJECT IS BEING DEVELOPED BY 8MINUTENERGY RENEWABLES (8ME) AND AES SOLAR (AESS) PURSUANT TO A JOINT DEVELOPMENT AGREEMENT

B. TYPE OF ENTITY(IES) (E.G. LLC, PARTNERSHIP):

THE COUNTERPARTY (OWNER) TO THE PROPOSED AGREEMENT IS A LIMITED LIABILITY COMPANY.

C. BUSINESS RELATIONSHIPS BETWEEN SELLER/OWNER/DEVELOPER:

82LV 8ME, LLC IS A WHOLLY OWNED SUBSIDIARY OF 8MINUTEENERGY, THE DEVELOPER. AES SOLAR, A JOINT VENTURE BETWEEN THE AES CORPORATION (NYSE: AES) AND RIVERSTONE HOLDINGS LLS A JOINT DEVELOPMENT PARTNER WITH 8ME IN THE PROJECT.

**5. PROJECT BACKGROUND, E.G., EXPIRING QF CONTRACT, PHASED PROJECT, PREVIOUS POWER PURCHASE AGREEMENT, CONTRACT AMENDMENT**

The proposed project is a new build solar project. The Project was bid into SDG&E's 2011 RFO for renewable generation and was shortlisted by SDG&E.

**6. SOURCE OF AGREEMENT, I.E., RPS SOLICITATION YEAR OR BILATERAL NEGOTIATION**

The Agreement is a product of SDG&E's 2011 Renewable RFO. The project was shortlisted by SDG&E from the offers that were received.

**C. GENERAL PROJECT(S) DESCRIPTION**

<b>Project Name</b>	Mount Signal I Solar Farm
<b>Technology</b>	Solar photovoltaic
<b>Capacity (MW)</b>	150-200 MW
<b>Capacity Factor</b>	28.30%
<b>Expected Generation (GWh/Year)</b>	495 GWh Degrading at 0.70%/year
<b>Initial Commercial Operation Date<sup>1</sup></b>	Phased COD, which requires an initial delivery date of 100 MW by June 30 2013; 150 MW by Sept 30 2013; and the full 150 - 200 MW online by Dec 31 2013.
<b>Date contract Delivery Term begins</b>	As of initial delivery of 1 MW
<b>Delivery Term (Years)</b>	25 years

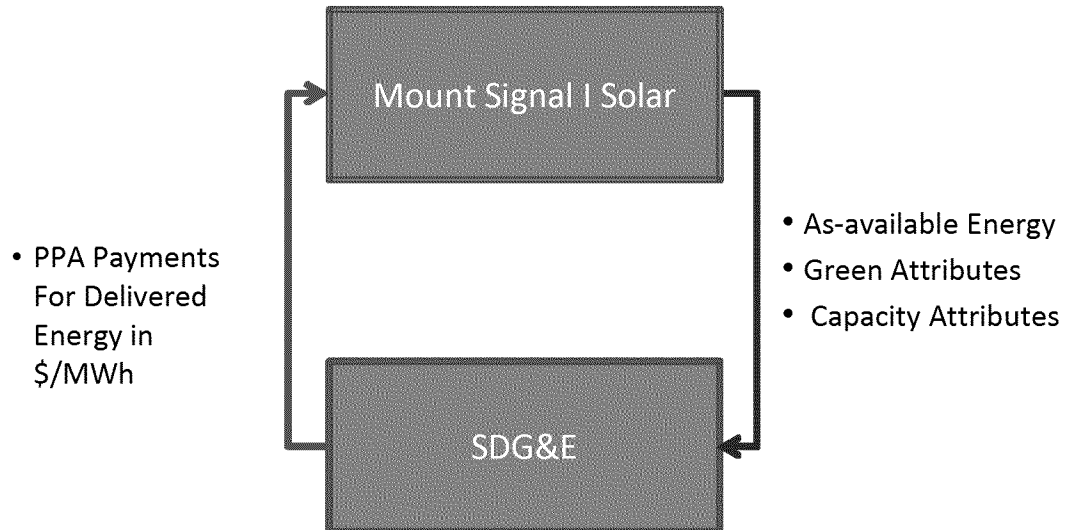
<b>Vintage (New / Existing / Repower)</b>	New facility
<b>Location (city and state)</b>	West of Calexico Imperial county , California
<b>Control Area (e.g., CAISO, BPA)</b>	CAISO
<b>Nearest Competitive Renewable Energy Zone (CREZ)</b>	Imperial Valley South CREZ 30
<b>Type of cooling, if applicable</b>	Not applicable
<b>Price relative to MPR (i.e. above/below)</b>	Above

<sup>1</sup> As defined in the Proposed Agreement. Details are provided in Confidential Appendix D, Section D (1), "Energy Delivery Requirements" in the Matrix of Major Contract Provisions of this Advice Letter.

#### **D. GENERAL DEAL STRUCTURE**

**CHARACTERISTICS OF CONTRACTED DEAL (I.E. PARTIAL/FULL OUTPUT OF FACILITY, DELIVERY POINT (E.G. BUSBAR, HUB, ETC.), ENERGY MANAGEMENT (E.G. FIRM/SHAPE, SCHEDULING, SELLING, ETC.), DIAGRAM AND EXPLANATION OF DELIVERY STRUCTURE**

The Proposed Agreement provides for the purchase of the full output of as-available energy, capacity attributes, and green attributes from the Mount Signal I Solar Farm facility for a 25-year term. The facility interconnects directly to the CAISO at the Imperial Valley Substation as a participating Generator in the CAISO.



#### **E. RPS STATUTORY GOALS**

**THE PROJECT IS CONSISTENT WITH AND CONTRIBUTES TOWARDS THE RPS PROGRAM'S STATUTORY GOALS SET FORTH IN PUBLIC UTILITIES CODE §399.11.**

Public Utilities Code section 399.11(b) explains that achieving the renewables portfolio standard through the procurement of various electricity products from eligible renewable energy resources is intended to provide several unique benefits, including, *inter alia*, displacing fossil fuel, promoting stable retail rates for electric service, protecting public health, improving environmental quality and adding new electrical generating facilities in the transmission network within the Western Electricity Coordinating Council service area.

The Proposed Agreement has a known price for its 25 years of deliveries which will aid in providing price certainty for ratepayers. As a solar resource, it will generate clean renewable energy with zero fuel costs, will create zero need for foreign fuel imports, and will produce zero greenhouse gas emissions into the atmosphere directly associated with energy production.

#### F. CONFIDENTIALITY

***CONFIDENTIAL TREATMENT OF SPECIFIC MATERIAL IS BEING REQUESTED. THE INFORMATION AND REASON(S) FOR CONFIDENTIAL TREATMENT IS CONSISTENT WITH THE SHOWING REQUIRED BY D.06-06-066, AS MODIFIED.***

As directed by the CPUC's Energy Division, confidential information in support of the Proposed Agreement is provided in Confidential Appendices A through G, as listed below:

- Appendix A: Consistency with Commission Decisions and Rules and Project Development Status
- Appendix B: Solicitation Overview
- Appendix C: Final RPS Project-Specific Independent Evaluator Report
- Appendix D: Contract Summary
- Appendix E: Comparison of Contract with Utility's Pro Forma Power Purchase Agreement
- Appendix F: Power Purchase Agreement
- Appendix G: Project's Contribution Toward RPS Goals
- Appendix H: Up front Showing for Category I Products

These appendices contain market sensitive information protected pursuant to Commission Decision ("D.") 06-06-066, et seq., as detailed in the concurrently-filed declaration. The following table presents the type of information within the confidential appendices and the matrix category under which D.06-06-066 permits the data to be protected.

<b>Type of Information</b>	<b>D.06-06-066 Confidential Matrix Category</b>
Analysis and Evaluation of Proposed RPS Projects	VII.G
Contract Terms and Conditions	VII.G
Raw Bid Information	VIII.A
Quantitative Analysis	VIII.B
Net Short Position	V.C
IPT/APT Percentages	V.C

## II. **CONSISTENCY WITH COMMISSION DECISIONS**

SDG&E's RPS procurement process complies with the Commission's RPS-related decisions as discussed in more detail in the following sections.

### A. RPS PROCUREMENT PLAN

1. **THE COMMISSION APPROVED SDG&E'S RPS PROCUREMENT PLAN AND SDG&E ADHERED TO COMMISSION GUIDELINES FOR FILING AND REVISIONS.**

On December 18, 2009 SDG&E filed its draft 2011 Renewable Procurement Plan (the "2011 RPS Plan").<sup>1</sup> Updates to the draft 2011 RPS Plan were filed on February 17, 2010 and April 9, 2010. On April 14, 2011, the CPUC issued D.11-04-030 ("the Decision") conditionally approving SDG&E's 2011 RPS Plan. In compliance with the direction set forth in the Decision, SDG&E filed a revised 2011 RPS Plan to incorporate changes required by the Commission. The Decision authorized SDG&E to proceed with its amended Plan unless suspended by the Energy Division Director. No such suspension was issued by the Energy Division; therefore, on May 12, 2011 SDG&E issued the 2011 RFO.

Below SDG&E demonstrates the reasonableness of the Proposed Agreements through comparison of the terms and conditions of the Proposed Agreements against the results of its 2011 RPS RFO

2. **THE PROCUREMENT PLAN'S ASSESSMENT OF PORTFOLIO NEEDS.**

The 2011 RPS Plan expresses SDG&E's commitment to meet the goal of serving 33% of its retail sales with renewable resources by 2020. SB2 (X1) ("SB2"), which went into effect in December 2011, requires SDG&E to purchase 20% of its retail sales, on average, for the 2011-2013 period; 25% by 2016, and 33% by 2020 from eligible renewable sources. Because of its mid-2013 initial online date, the project is expected to contribute materially to SDG&E's renewable energy portfolio during the first (2011-2013) compliance period.

SDG&E's goal is to comply with applicable RPS legislation by developing and maintaining a diversified renewable portfolio, selecting from offers using the Least-Cost, Best-Fit ("LCBF") evaluation criteria. The RFO approved as part of SDG&E's RPS Plan seeks offers from all technologies of renewable projects that meet the requirements for eligible facilities as specified in applicable statute and as established by the California Energy Commission ("CEC"). The RFO seeks unit firm or as-available deliveries.

SDG&E's RPS Plan also states that, to the extent a bilateral offer complies with RPS program requirements, fits within SDG&E's resource needs, is competitive when compared against recent RFO offers and provides benefits to SDG&E customers, SDG&E will pursue such an agreement. Amended contracts, as with bilateral offers, will be compared to alternatives presented in the most recent RPS solicitation.

3. **THE PROJECT IS CONSISTENT WITH SDG&E'S PROCUREMENT PLAN AND MEETS SDG&E'S PROCUREMENT AND PORTFOLIO NEEDS (E.G. CAPACITY, ELECTRICAL ENERGY, RESOURCE ADEQUACY, OR ANY OTHER PRODUCT RESULTING FROM THE PROJECT).**

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<sup>1</sup> The draft Plan submitted by SDG&E was originally submitted as its 2010 draft Plan. D.11-04-030 refers to the draft Plan as the "2011" Plan since the decision was issued in 2011 and the solicitation resulting from the final decision was held in 2011.

The Proposed Agreement conforms to SDG&E's most recent Commission-approved 2011 RPS Plan by delivering bundled renewable energy and associated Green Attributes that fill a portion of SDG&E's RPS net short position. The Proposed Agreement also provides for the purchase Resource Adequacy (RA) if available. The transaction complies with RPS program requirements, meets the portfolio needs outlined by the 2011 RPS Plan and is competitive when compared to the other bids submitted in the 2011 RFO.

4. **THE PROJECT MEETS REQUIREMENTS SET FORTH IN THE SOLICITATION.**

The minimum requirements established in the most recent RFO at the time of negotiation origination (2011) were as follows:

- a. COMMENCE DELIVERIES IN 2011, 2012, 2013, 2014 OR 2015
- b. SHORT TERM AGREEMENTS OF UP TO 4 YEARS IN DURATION
- c. THE PROJECT MUST BE RPS-ELIGIBLE
- d. THE NET CONTRACT CAPACITY MUST BE  $\geq$  1.5MW, NET OF ALL AUXILIARY AND STATION PARASITIC LOADS; (IF WITHIN SDG&E SERVICE AREA)
- e. THE NET CONTRACT CAPACITY MUST BE  $\geq$  5MW, NET OF ALL AUXILIARY AND STATION PARASITIC LOADS; (IF OUTSIDE OF SDG&E SERVICE AREA)
- f. ALL GREEN ATTRIBUTES MUST BE TENDERED TO SDG&E

The Proposed Agreement fulfills these requirements. The proposed PPA's COD is in mid 2013. Therefore SDG&E accepted the offer and negotiated the Proposed Agreement.

B. **BILATERAL CONTRACTING – IF APPLICABLE**

1. **THE CONTRACT COMPLIES WITH D.06-10-019 AND D.09-06-050.**

The contract was not procured through bilateral negotiations.

2. **THE PROCUREMENT AND/OR PORTFOLIO NEEDS NECESSITATING SDG&E TO PROCURE BILATERALLY AS OPPOSED TO A SOLICITATION.**

Not Applicable.

3. **WHY THE PROJECT DID NOT PARTICIPATE IN THE SOLICITATION AND WHY THE BENEFITS OF THE PROJECT CANNOT BE PROCURED THROUGH A SUBSEQUENT SOLICITATION.**

Not Applicable. The project was selected and shortlisted by SDG&E's competitive 2011 RPS RFO, and was not a bilateral contract.

C. **LEAST COST BEST FIT (LCBF) METHODOLOGY AND EVALUATION – IF APPLICABLE**

The following sections review SDG&E's 2011 RPS RFO process. The offers into the 2011 RFO were used to benchmark the Proposed Agreement.

1. **THE SOLICITATION WAS CONSISTENT WITH SDG&E'S COMMISSION-APPROVED REQUEST FOR OFFERS (RFO) BIDDING PROTOCOL.**

As specified by the Commission-approved RFO bidding protocol, the 2011 RFO was issued on May 12, 2011. Responses were due July 11, 2011. SDG&E solicited bids from all RPS-eligible technologies.

SDG&E sought proposals for peaking, baseload, dispatchable (unit firm) or as-available deliveries. Such proposals could include capacity and energy from:

- a) Re-powering of existing facilities;
- b) Incremental capacity upgrades of existing facilities;
- c) New facilities;
- d) Existing facilities that are scheduled to come online during the years specified in the RFO that have excess or uncontracted quantities of power for a short time frame;
- e) Existing facilities with expiring contracts; or
- f) Eligible resources currently under contract with SDG&E. SDG&E shall consider offers to extend terms of or expand contracted capacities for existing agreements.

SDG&E solicited two types of projects:

- a) Power purchase agreements for short-term deliveries up to four years and long-term deliveries up to thirty years;
- b) TRECs

SDG&E established an open, transparent, and competitive playing field for the procurement effort. The following protocols were established within its solicitation:

SDG&E established an open, transparent, and competitive playing field for the procurement effort. The following protocols were established within its solicitation:

- a) An RFO website was created, allowing respondents to download solicitation documents, participate in a Question and Answer forum and see updates or revisions associated with the process;
- b) Two bidders conference were held, one in San Diego, CA and one in El Centro, CA with more than 150 people in attendance between the two conferences. The San Diego conference included a webinar available for interested parties who could not attend in person.
- c) Internet upload capabilities were available to accept electronic offers;
- d) The Independent Evaluator participated in the selection process, including the direct evaluation of bids; and
- e) SDG&E adhered to the following RFO schedule:

<b>DATE</b>	<b>EVENT</b>
May 12, 2011	RFO Issued
June 2, 2011	Pre-Bid Conference (in San Diego, California)

June 8, 2011	Pre-Bid Conference (in El Centro, California)
July 11, 2011	Offers Due
August 10, 2011	Briefed PRG on all offers received, preliminary LCBF ranking, preliminary list of highest ranked offers and preliminary shortlist.
August 19, 2011	Briefed PRG and sought PRG feedback on SDG&E's need determination, selection criteria based on the need, final LCBF ranking and final shortlist based on the selection criteria.
September 7, 2011	Notified Energy Division of final shortlist.
November 7, 2011	Final LCBF Report to the CPUC

**2. THE LCBF BID EVALUATION AND RANKING WAS CONSISTENT WITH COMMISSION DECISIONS ADDRESSING LCBF METHODOLOGY; INCLUDING SDG&E'S APPROACH TO/APPLICATION OF:**

SDG&E evaluates all offers, including this offer from Mt. Signal I Solar, in accordance with the LCBF process outlined in D.03-06-071, D.04-07-029, and its approved RPS 2011 Procurement Plan. The Commission established in D.04-07-029 a process for evaluating "least-cost, best-fit" renewable resources for purposes of IOU compliance with RPS program requirements. SDG&E has adopted such a process in its renewable procurement plan. In D.06-05-039, the Commission observed that "the RPS project evaluation and selection process within the LCBF framework cannot ultimately be reduced to mathematical models and rules that totally eliminate the use of judgment."<sup>2</sup> It determined, however, that each IOU should provide an explanation of its "evaluation and selection model, its process, and its decision rationale with respect to each bid, both selected and rejected," in the form of a report to be submitted with its short list of bids (the "LCBF Report"). In addition, SDG&E authorized the Independent Evaluator to perform the LCBF analysis to determine the least-cost best-fit ranking of projects in the RFO.

**a. MODELING ASSUMPTIONS AND SELECTION CRITERIA**

To incorporate a "best-fit" element into evaluation of offers, instead of simply comparing prices for all offers ("least-cost"), SDG&E calculated an "All-In Bid Ranking Price" for each offer. Elements of the All-In Bid Ranking Price are described below.

SDG&E compared bids from the 2011 RFO by sorting all projects by the All-In Bid Ranking Price, from lowest to highest. Those projects with the lowest All-In Bid Ranking Price that passed through qualitative filters for location and viability were short listed. From a "best-fit" perspective for 2011, projects which fit SDG&E's portfolio needs best were in-state projects that could contribute significantly to SDG&E's renewable energy portfolio in compliance period 1 and were highly viable, but these projects did not have to deliver over the Sunrise Powerlink.

<sup>2</sup> See D.06-05-039, *mimeo*, p. 42.



The All-In Bid Ranking Price of the Proposed Agreement, as calculated and presented in *Confidential Appendix A – Consistency with Commission Decisions and Rules*, is economically justifiable because it is consistent with other selected projects and the Mount Signal I PPA contains provisions which protect the ratepayers interests and thus it a crucial component of SDG&E's renewable portfolio.

b. QUANTITATIVE FACTORS

Market valuation (the "All-In Bid Ranking Price") - The following discussion describes how SDG&E calculated an all-in price that included the factors listed. Included in *Confidential Appendix D – Contract Summary* is a detailed description of how each of these factors applied to the specific calculation of the Projects' All-In Bid Ranking Prices.

Levelized Contract Cost: The offered bundled energy or TREC prices were multiplied by deliveries over the life of the proposed contract (and time-of-day factors, if applicable) and discounted back to the beginning of the contract to form Levelized Contract Cost.

Above Market Cost: For PPA bids in the 2011 RPS RFO, a project-specific MPR was calculated based upon a set of baseload price referents calculated using the 2009 MPR model and forward prices for natural gas in June and July of 2011. The project-specific Price Referent was then subtracted from the Levelized Contract Cost as offered in the bid to produce the Above Market Cost. All other adders were added to the Above Market Cost to form the Bid Ranking Price, which was used to rank bids in the RFO. TREC offers are automatically considered Above Market Costs and are ranked with the Above Market Costs from PPA bids, as modified with the adders below.

Transmission Cost Adder: Typically SDG&E calculates costs for transmission network upgrades or additions, using the information provided through the Transmission Ranking Cost Report ("TRCR") approved by the CPUC. To be as inclusive as possible, SDG&E uses TRCR-based transmission costs even for offers that were not submitted to the TRCR rather than considering those offers to be non-conforming. The total amount of contemplated generation interconnections studied in the TRCR always exceeded the amount of generating capacity that SDG&E would consider shortlisting.

Deliverability Adder: In order to comply with resource adequacy requirements issued by the Commission and the California Independent System Operator ("CAISO"), SDG&E assumes that new generating resources can meet the CAISO's requirements for full deliverability within SDG&E's service territory. For projects that are unable or unwilling to meet deliverability requirements for generation in SDG&E's service territory, an adder was assessed to estimate the cost of additional full-deliverability capacity that SDG&E will have to procure that would otherwise have been provided. Projects outside of SDG&E's territory but within California were assessed a System Deliverability Adder; projects outside of California that are subject to CAISO's import allocation criteria, or projects that elected to have an "energy-only" interconnection, were assessed the Full Deliverability Adder. The value of the deliverability adder is set by differences between the project's project-specific Market Price Referent calculated with

SDG&E's all-in time-of-day factors, and the project-specific Market Price Referent calculated with SDG&E's energy-only time-of-day factors and adjusted by the ratio of system to local resource adequacy costs for projects with a System Deliverability Adder.

Congestion Cost Adders: Congestion analysis was performed using a model which provided hourly Locational Marginal Prices ("LMP") for specific years for each of the shortlisted bids. Due to the large number of bids, congestion costs were calculated at major Locational Marginal Pricing nodes within the CAISO system that were located at or near interconnections for bids offered into the RFO for solar, wind, and baseload delivery profiles. Congestion costs (\$/MWh) were then calculated based on the difference between the hourly LMP at each major LMP node and the hourly LMP values for SDG&E's Load Aggregation Point ("LAP"). The LMP values in the LAP were weighted for all bus points within SDG&E's service territory using approved CAISO allocation factors

#### A. PORTFOLIO FIT

SDG&E's RPS Procurement Plan states that SDG&E does not have a preference for a particular product or technology type and that SDG&E has latitude in the resources that it selects. However, as explained above, time of delivery factors, transmission cost, congestion costs, commercial operations date and resource adequacy adjustment were evaluated to determine the impact to SDG&E's portfolio. These portfolio fit factors were valued and included in the economic comparison of options in order to ensure the least-cost projects were also best-fit selections for the portfolio.

See Section C "Least Cost Best-Fit" in the *Confidential Appendix A – Consistency With Commission Decisions And Rules* for details on the Proposed Agreement's costs and benefits in the context of SDG&E's portfolio needs.

#### B. TRANSMISSION ADDER

See Section C "Least Cost Best-Fit" in the *Confidential Appendix A – Consistency With Commission Decisions And Rules* for details on the Proposed Agreement's application of the transmission cost adder.

#### C. APPLICATION OF TIME OF DELIVERY FACTORS (TODs)

TOD factors were used to compute Levelized Contract Costs for bids where TOD pricing was requested, and was used to compute Deliverability Adders in its LCBF evaluation. The Levelized Contract Cost, and project-specific Price Referents, were computed using projected delivery profiles provided by the respondents. Application of TOD factors in the evaluation of the Proposed Agreement is explained in Section C "Least Cost Best-Fit" in the *Confidential Appendix A – Consistency With Commission Decisions And Rules*.

SDG&E's standard "all-in" TOD factors from the 2011 RFO:

	<b>SUMMER</b> July 1 – October 31	<b>WINTER</b> November 1 – June 30
<b>ON-PEAK</b>	Weekdays 11am – 7pm <b>2.501</b>	Weekdays 1pm - 9pm <b>1.089</b>

<b>SEMI-PEAK</b>	Weekdays 6am – 11am; Weekdays 7pm - 10pm <b>1.342</b>	Weekdays 6am – 1pm; Weekdays 9pm – 10pm <b>0.947</b>
<b>OFF-PEAK*</b>	All other hours <b>0.801</b>	All other hours <b>0.679</b>
*All hours during NERC holidays are off-peak.		

SDG&E's "energy-only" TOD factors for Deliverability Adder computations:

	<b>SUMMER</b> July 1 – October 31	<b>WINTER</b> November 1 – June 30
<b>ON-PEAK</b>	Weekdays 11am – 7pm <b>1.531</b>	Weekdays 1pm - 9pm <b>1.192</b>
<b>SEMI-PEAK</b>	Weekdays 6am – 11am; Weekdays 7pm - 10pm <b>1.181</b>	Weekdays 6am – 1pm; Weekdays 9pm – 10pm <b>1.078</b>
<b>OFF-PEAK*</b>	All other hours <b>0.900</b>	All other hours <b>0.774</b>
*All hours during NERC holidays are off-peak.		

#### D. OTHER FACTORS CONSIDERED

Aside from the above considerations no other quantitative factors were considered by SDG&E in determining the All-In Bid Ranking Price.

#### c. QUALITATIVE FACTORS (E.G., LOCATION, BENEFITS TO MINORITIES, ENVIRONMENTAL ISSUES, ETC.)

As stated in the RFO, SDG&E differentiates offers of similar cost or may establish preferences for projects by reviewing, if applicable, qualitative factors including the following:

- a) Project viability
- b) Local reliability
- c) Benefits to low income or minority communities
- d) Resource diversity
- e) Environmental stewardship

Due to the changes in law made by ("SB 2") x1 2, certain flexible compliance mechanisms contained in the original RPS legislation have been eliminated and compliance targets have changed, requiring SDG&E to focus upon projects coming online and providing RPS deliveries within the years 2011 to 2013 in order to meet the new RPS compliance targets. Due to this change in need, the large number of bids that were received in the 2011 RPS RFO, and the limited number of Commission meetings scheduled to consider new RPS agreements between late 2011 and mid-year 2013, qualitative rules were imposed during the bid evaluation process to consider only those bids that could reasonably meet SDG&E's near term RPS needs. Projects eligible for short listing were limited to those bids with deliveries of 90,000 MWh or more from the period 2011 to 2013;

in particular, low priced projects were considered if they were able to generate more than 45,000 MWh in the same period as long as they were among the five lowest-cost PPA bids.

SDG&E also considered viability factors included in the Commission's Project Viability Calculator, such as the degree of experience of the developer, ability to achieve interconnection, technical feasibility, site control, and resource quality in the vicinity of the project site.

#### **D. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS**

##### **1. THE PROPOSED CONTRACT COMPLIES WITH D.08-04-009, D.08-08-028 AND D.11-01-025**

The Proposed Agreement contains standard terms and conditions as authorized by the Commission in D.04-06-014, D.08-04-009, D.08-08-028 and D.11-01-025. A side-by-side comparison of the standard terms and conditions is located in *Section D – Standard terms and Conditions of Confidential Appendix A – Consistency with Commission Decisions and Rules* found in Part 2 of this Advice Letter. Also a summary of major contract provisions is provided in *Confidential Appendix D – Contract Summary*. Copies of the Proposed Agreement and supporting documentation are also provided in *Confidential Appendix F – Power Purchase Agreement*.

##### **2. SPECIFIC PAGE AND SECTION NUMBER WHERE THE COMMISSION'S NON-MODIFIABLE TERMS ARE LOCATED IN THE PPA.**

The locations of non-modifiable terms are indicated in the table below:

<b>NON-MODIFIABLE TERM</b>	<b>PPA SECTION; PPA PAGE #</b>
STC 1: CPUC Approval	Section 1.1; Page 6
STC 2: Green Attributes & RECs	Section 1.1; Page 12 Section 3.1(i); Page 27
STC 6: Eligibility	Section 10.2(a); Page 49
STC 17: Applicable Law	Section 13.8; Page 61
STC REC-1: Transfer of RECs	Section 10.2(b); Page 54
STC REC-2: WREGIS Tracking of RECs	Section 3.1(l) [last sentence]; Page 28

##### **3. REDLINE OF THE CONTRACT AGAINST SDG&E'S COMMISSION-APPROVED PRO FORMA RPS CONTRACT.**

See *Confidential Appendix E – Comparison of Contract with SDG&E's Pro Forma Power Purchase Agreement* of this Advice Letter.

#### **E. UNBUNDLED RENEWABLE ENERGY CREDIT (REC) TRANSACTIONS**

As defined under D.10-03-021, *et seq.*, the Proposed Agreement is a bundled solar energy product.

#### **F. MINIMUM QUANTITY**

**MINIMUM CONTRACTING REQUIREMENTS APPLICABLE TO SHORT TERM CONTRACTS WITH EXISTING FACILITIES**

Not applicable. The PPA is for a term of 25 years.

**G. TIER 2 SHORT-TERM CONTRACT “FAST TRACK” PROCESS**

Not Applicable

**H. MARKET PRICE REFERENCE (MPR)****1. CONTRACT PRICE RELATIVE TO THE MPR.**

The pricing included in the Proposed Agreement is above the 2009 MPR. The exact pricing and relation to the MPR is discussed in detail in *Confidential Appendix D – Contract Summary*.

**2. TOTAL COST RELATIVE TO THE MPR.**

The total cost of this Proposed Agreement is above the 2009 MPR. The total contract cost and how it compares to the MPR is discussed in more detail within *Confidential Appendix D – Contract Summary*.

**I. ABOVE MPR FUNDS (AMFs)****1. ELIGIBILITY FOR AMFs UNDER PUBLIC UTILITIES CODE 399.15(D) AND RESOLUTION E-4199**

The Proposed Agreement is from the 2011 RFO and, therefore, is eligible for AMFs.

**2. THE STATUS OF THE UTILITY’S AMFs LIMIT.**

SDG&E’s AMF limit has been exhausted.<sup>3</sup>

**3. EXPLAINING WHETHER SDG&E VOLUNTARILY CHOOSES TO PROCURE AND INCUR THE ABOVE-MPR COSTS.**

SDG&E’s AMF limit has been exhausted.<sup>3</sup>

**J. INTERIM EMISSIONS PERFORMANCE STANDARD**

COMPLIANCE WITH D.07-01-039, WHERE THE COMMISSION ADOPTED A GREENHOUSE GAS EMISSIONS PERFORMANCE STANDARD (EPS) APPLICABLE TO CONTRACTS FOR BASELOAD GENERATION, AS DEFINED, WITH DELIVERY TERMS OF FIVE YEARS OR MORE.

**1. EXPLAIN WHETHER OR NOT THE CONTRACT IS SUBJECT TO THE EPS.**

<sup>3</sup> See correspondence dated May 28, 2009 from CPUC Energy Division Director, Julie Fitch, advising SDG&E that its AMF balance is zero.

This Proposed Agreement is not subject to the EPS as it is for as-available renewable energy with a capacity factor that is below the 60% limit established in the EPS decision.

2. **HOW THE CONTRACT IS IN COMPLIANCE WITH D.07-01-039**

The Project is not a baseload generating resource. Solar photovoltaic power plants produce no greenhouse gases and are compliant with D.07-01-039 provided that there are no provisions in the purchase agreement for the purchase of substitute energy from unspecified energy sources to meet contract delivery requirements.<sup>4</sup> There are no provisions in the Proposed Agreement for substitute energy purchases to meet contract delivery requirements. Thus the Proposed Agreement meets the requirements of D.07-01-039.

3. **HOW SPECIFIED BASELOAD ENERGY USED TO FIRM/SHAPE MEETS EPS REQUIREMENTS (ONLY FOR PPAs OF FIVE OR MORE YEARS AND WILL BE FIRMED / SHAPED WITH SPECIFIED BASELOAD GENERATION.)**

Since the project will directly connect to a CAISO delivery point it will be considered a CAISO internal resource and, therefore, no firming and shaping is involved with the Proposed Agreement.

4. **UNSPECIFIED POWER USED TO FIRM/SHAPE WILL BE LIMITED SO THE TOTAL PURCHASES UNDER THE CONTRACT (RENEWABLE AND NONRENEWABLE) WILL NOT EXCEED THE TOTAL EXPECTED OUTPUT FROM THE RENEWABLE ENERGY SOURCE OVER THE TERM OF THE CONTRACT. (ONLY FOR PPAs OF FIVE OR MORE YEARS.)**

Since the project will directly connect to a CAISO delivery point it will be considered a CAISO internal resource and, therefore, no firming and shaping is involved with the Proposed Agreement.

5. **SUBSTITUTE SYSTEM ENERGY FROM UNSPECIFIED SOURCES**

a. **A SHOWING THAT THE UNSPECIFIED ENERGY IS ONLY TO BE USED ON A SHORT-TERM BASIS**

As with any CAISO Participating Generator (conventional or renewable) when the real time delivered energy differs from the scheduled quantity it requires imbalance energy to make up the difference. When the schedule is short (i.e., negative imbalance) the grid must make up that difference from other unspecified resources. The use of such unspecified resources is: (i) short-term for only as long as the imbalance exists (i.e., until the sun comes out from behind a cloud or the sunshine returns to the PIRP-forecasted level); (ii) operational in nature; and (iii) required by the Participating Generator Agreement, not the Proposed Agreement. As mentioned above, the Proposed Agreement does not allow for substitute energy purchases.

b. **THE UNSPECIFIED ENERGY IS ONLY USED FOR OPERATIONAL OR EFFICIENCY REASONS;**

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<sup>4</sup> D.07-01-039, *mimeo*, p. 270.

As with any CAISO Participating Generator (conventional or renewable) when the real time delivered energy differs from the scheduled quantity it requires imbalance energy to make up the difference. When the schedule is short (i.e., negative imbalance) the grid must make up that difference from other unspecified resources. The use of such unspecified resources is: (i) short-term for only as long as the imbalance exists (i.e., until the sun comes out from behind a cloud or the sunshine returns to the PIRP-forecasted level); (ii) operational in nature; and (iii) required by the Participating Generator Agreement, not the Proposed Agreement. As mentioned above, the Proposed Agreement does not allow for substitute energy purchases.

**c. THE UNSPECIFIED ENERGY IS ONLY USED WHEN THE RENEWABLE ENERGY SOURCE IS UNAVAILABLE DUE TO A FORCED OUTAGE, SCHEDULED MAINTENANCE, OR OTHER TEMPORARY UNAVAILABILITY FOR OPERATIONAL OR EFFICIENCY REASONS**

The Proposed Agreement does not permit substitution of unspecified energy even during forced or scheduled outages or for any other reason.

**d. THE UNSPECIFIED ENERGY IS ONLY USED TO MEET OPERATING CONDITIONS REQUIRED UNDER THE CONTRACT, SUCH AS PROVISIONS FOR NUMBER OF START-UPS, RAMP RATES, MINIMUM NUMBER OF OPERATING HOURS.**

The Proposed Agreement does not permit substitution of unspecified energy for any reason.

**K. PROCUREMENT REVIEW GROUP (PRG) PARTICIPATION**

**1. PRG PARTICIPANTS (BY ORGANIZATION/COMPANY).**

SDG&E's PRG is comprised of over fifty representatives from the following organizations:

- a. California Department of Water Resources
- b. California Public Utilities Commission – Energy Division
- c. California Public Utilities Commission – Division of Ratepayers Advocates
- d. The Utility Reform Network
- e. Union of Concerned Scientists
- f. Coalition of California Utility Employees

**2. WHEN THE PRG WAS PROVIDED INFORMATION ON THE CONTRACT**

The PRG was first notified about the project on August 10<sup>th</sup>, 2011. The project appeared on the regularly scheduled PRG Meeting agenda and was discussed at the following PRG Meetings; August 19, September 7, September 16, October 21 and November 18 2011. Also it was also presented and discussed at the January 20<sup>th</sup> and February 17, 2012 PRG Meetings.

**3. SDG&E CONSULTED WITH THE PRG REGARDING THIS CONTRACT**

SDG&E consulted with the PRG regarding this Proposed Agreement at the meetings cited above. The slides used at these Meetings are provided in Section

J – PRG Participation and Feedback of the *Confidential Appendix A – Consistency with Commission Decisions and Rules* contained in this Advice Letter.

**4. WHY THE PRG COULD NOT BE INFORMED (FOR SHORT-TERM CONTRACTS ONLY)**

Not applicable since this is not a short-term contract.

**L. INDEPENDENT EVALUATOR (IE)**

THE USE OF AN IE IS REQUIRED BY D.04-12-048, D.06-05-039, 07-12-052, AND D.09-06-050

**1. NAME OF IE: PA Consulting Group**

**2. OVERSIGHT PROVIDED BY THE IE**

PA Consulting Group was involved in all aspects of SDG&E's 2011 RPS RFO process including, but not limited to: reviewing RFO document development and creation of evaluation criteria, reviewing and monitoring of all received bids, involvement in bid evaluation for conformance and ranking, conducting the LCBF analysis, as well as monitoring of communications and negotiations with affiliated parties.

SDG&E worked with its IE on evaluation of the Proposed Agreement. The IE has reviewed the major contract terms and SDG&E's method of comparing the project to bids received from the 2011 RFO and has spot-checked relevant calculations. A confidential Independent Evaluator Report was issued on the Proposed Agreement and is attached as *Confidential Appendix C – Final RPS Project Specific IE Report* in this Advice Letter. Below is a public version of that same report.

**3. IE MADE ANY FINDINGS TO THE PROCUREMENT REVIEW GROUP**

The IE did not provide any specific findings related to the Proposed Agreement to the PRG.

**4. PUBLIC VERSION OF THE PROJECT-SPECIFIC IE REPORT<sup>5</sup>**



Redacted IE Report  
Mt Signal I Solar Farm

**III. PROJECT DEVELOPMENT STATUS**

**A. COMPANY / DEVELOPMENT TEAM**

<sup>5</sup> A full printed copy of this public IE Report is located at the end of Part 2 of this Advice Letter



**1. RELEVANT EXPERIENCE OF PROJECT DEVELOPMENT TEAM AND/OR COMPANY PRINCIPALS**

8minutenergy is a California based utility-scale solar developer with a portfolio totaling more than 2000 megawatts (MW) of solar PV power. 700 MW of these projects are in advanced development stages. All are located in California, and meet the "in-state" utility requirements. In addition, all 8minutenergy projects have ready access to the transmission grid and are to be built on "disturbed land" for lower environmental impact and faster permitting.

AES Solar is a proven, global developer with 152 MW in operation or under construction. AES Solar develops, finances, constructs, owns, and operates utility-scale photovoltaic ("PV") installations around the world. AES Solar's broad experience developing and operating solar facilities is bolstered by a 2.7-gigawatt development pipeline in the US, Spain, Italy, France, Greece, Bulgaria, and India.

AES Solar is a 50/50 joint venture between The AES Corporation ("AES") and Riverstone Holdings, LLC ("Riverstone") AES Solar recently signed 20-year power purchase agreements (PPA) with the Puerto Rico Electric Power Authority and the Kauai Island Utility Cooperative.

AES Solar is headquartered in Arlington, VA and employs a team of 65 professionals, including developers, engineers, accountants, financial and procurement specialists. The Company is led by a highly experienced team with a long and successful track record in the global power and renewables, project development, engineering, procurement and construction, operations and maintenance, finance, and legal sectors.

The AES Corporation is a Fortune 500 energy services holding company, providing electricity, natural gas, and diverse energy solutions, with 2010 revenues of \$16.6 billion. With 28,000 employees and operations in 29 countries on five continents, AES owns and manages \$40 billion in total assets, and its generation and distribution facilities have the capacity to serve 100 million people worldwide. AES's fifteen regulated utilities amass annual sales of over 78,000 gigawatt-hours, and its 123 generation facilities have the capacity to generate over 43 GW. More than 20% of AES's generation comes from renewable energy.

Riverstone is a New York-based energy and power-focused private equity firm founded in 2000. Riverstone conducts buyout and growth capital investments in the midstream, upstream, power, oilfield services, and renewable sectors of the energy industry. To date, Riverstone has committed approximately \$15.9 billion to 77 investments in North America, South America, Europe and Asia and has approximately \$17 billion under management across six investment funds, including the world's largest renewable energy fund.

**2. SUCCESSFUL PROJECTS (RENEWABLE AND CONVENTIONAL)**

AES Solar has a total of 119.9 MW in operation at the following sites:

**Projects In Operation**

As of June 1, 2011

OPERATING		MW		
Country	Project Name	Size	COD	
1	Spain	Acula	2.3	2008
2	Spain	Alcudia	1.2	2008
3	Spain	Alhama	1.9	2008
4	Spain	Alvarado	5.8	2008
5	Spain	Darro	5.8	2008
6	Spain	Iznalloz	2.9	2008
7	Spain	Malagon	8.0	2008
8	Spain	Pedro Martinez	1.3	2008
9	Spain	Villamesias	2.4	2008
10	Greece	Iktinos	4.3	2010
11	France	Sault	1.2	2009
12	Italy	Cellino San Marco	43.0	2010
13	Italy	Torchiarolo	8.0	2010
14	Italy	Ugento	2.9	2011
15	Bulgaria	Kalipetrovo	3.9	2011
16	Italy	Soemina	6.8	2011
17	Italy	Francavilla Fontana	8.0	2011
18	Italy	Latina	3.0	2011
19	Italy	Cocomeri	3.8	2011
20	Italy	Francofonte	3.4	2011
<b>Total</b>		<b>119.9</b>		

**B. TECHNOLOGY****1. TECHNOLOGY TYPE AND LEVEL OF TECHNOLOGY MATURITY****a. THE TYPE AND STAGE OF THE PROJECT'S PROPOSED TECHNOLOGY**

The proposed facility will utilize photovoltaic technology incorporating PV modules wired in series to comprise 1 MW blocks. Final project engineering and layout will be optimized based on panel supplier selection and will incorporate single-axis or fixed-tilt designs as appropriate. The facility will deliver energy on an "as available" basis from the solar panels installed as part of the project.

**b. COMMERCIAL DEMONSTRATION**

Photovoltaic production worldwide has been doubling every two years, increasing by an average of 48% each year since 2002, making it the world's fastest-growing energy technology. 90% of this generating capacity consists of grid-connected electrical systems. The US is the fourth largest solar PV market in the world. The market has grown from 168 MW in 2001 to around 1,111 MW by the end of 2008. A

large share of the PV installations in the country can be found in California, where, in 2008, California accounted for 468 MW of the grid-connected solar PV in the U.S.<sup>6</sup>

In 2010 alone over 3,000 MW of large scale PV plants (>1 MW) were connected to power grids around the world and there are over fifty PV power plants in operation with a rating in excess of 20 MWp, eight of them being >50 MWp.<sup>7</sup>

These numbers demonstrate that photovoltaic technology has been a commercial success. It has ample history of operation with utility-scale operations dating back to 1984 and the installation of the Rancho Seco solar power station by SMUD.

**C. THE CONFIGURATION AND POTENTIAL ISSUES AND/OR BENEFITS CREATED BY THE HYBRID TECHNOLOGY.**

The technology is not a hybrid technology.

**2. QUALITY OF RENEWABLE RESOURCE**

**a. THE QUALITY OF THE RENEWABLE RESOURCE THAT THE PROJECT WILL RELY UPON.**

A quality assessment of the solar resource in the region of the Project was undertaken by 8ME and AES Solar. The solar resource for the Project Site is based on available GHI data from both modeled and measured sources, including a solar resource analysis performed by 3TIER with adjustments made based on ground station data for the vicinity of the Project Site.

The Project retained SAIC as an Independent Engineer (IE) to conduct an Energy Production Review ("SAIC Review") in Jan 2012. SAIC reviewed National Solar Radiation Database ("NSRDB") data, published by the National Renewable Energy Laboratory ("NREL"), including a subset of the NSRDB data, the NREL dataset referred to as Typical Meteorological Year 3 ("TMY3"). They also considered the satellite-derived NSRDB data for 1998 - 2005 available through the NREL Solar Power Prospector Web site ("Prospector"). In addition, they reviewed ground-measured irradiance data from the California Irrigation Management Information System ("CIMIS") and the Arizona Meteorological Network ("AZMET").

The original developer of the Project installed a meteorological station approximately 13 km northwest of the Project Site, at the San Diego Gas & Electric Imperial Valley Substation (the "IVS MET station"), with data collection commencing in June 2008 and continuing through August 2011 (at which time 3TIER performed its analysis). MSS retained 3TIER to utilize its proprietary satellite analysis methods to develop and update a typical meteorological year ("TMY") dataset for the Project.

The SAIC review considers the 3TIER adjusted satellite dataset of 2,118 kWh/m<sup>2</sup> the best available solar resource estimate for the project site.

<sup>6</sup> "Solar Expected to Maintain its Status as the World's Fastest-Growing Energy Technology" [www.socialfunds.com/news/article.cgi/2639.html](http://www.socialfunds.com/news/article.cgi/2639.html)

<sup>7</sup> "Large-scale photovoltaic power plants" [www.pvresources.com/en/top50pv.php](http://www.pvresources.com/en/top50pv.php)

**b. FUEL RESOURCE ANALYSIS AND THE DEVELOPER'S FUEL SUPPLY PLAN  
(FOR BIOMASS PROJECTS ONLY)**

**i. FROM WHOM/WHERE IS THE FUEL BEING SECURED; AND**

Not applicable. This proposed solar project will not depend on biomass fuel.

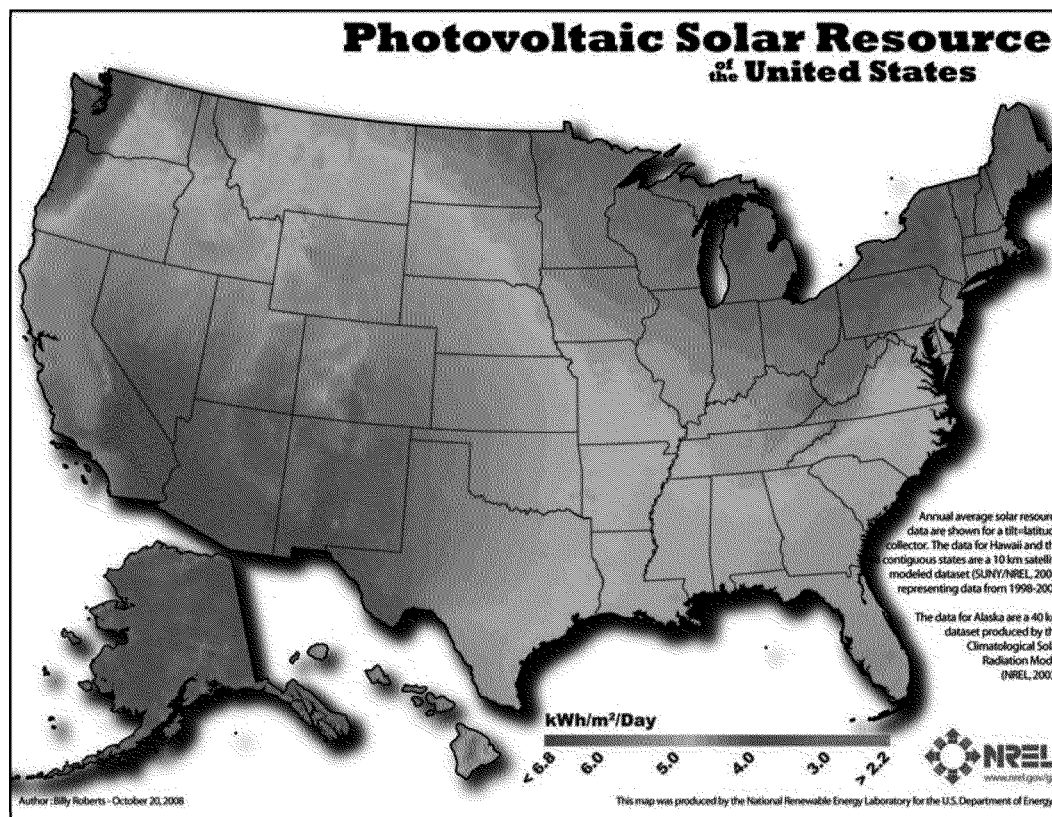
**ii. WHERE THE FUEL IS BEING STORED**

Not applicable. This proposed solar project will not depend on biomass fuel.

**c. CONFIDENCE THAT THE PROJECT WILL BE ABLE TO MEET THE TERMS OF THE  
CONTRACT GIVEN SDG&E'S INDEPENDENT UNDERSTANDING OF THE QUALITY OF  
THE RENEWABLE RESOURCE.**

According to NREL insolation maps (see below), the project is located within a region with one of the best solar resources in the United States. The SAIC review considers the 3TIER adjusted satellite dataset of 2,118 kWh/m<sup>2</sup> the best available solar resource estimate for the project site.

The project is also far enough away from the coast to avoid impacts caused by the marine layer. These facts, plus the public data described above, give SDG&E confidence that the project will be able to meet contractual requirements.



### 3. OTHER RESOURCES REQUIRED

#### a. OTHER FUEL SUPPLY (OTHER THAN THE RENEWABLE FUEL SUPPLY DISCUSSED ABOVE) NECESSARY TO THE PROJECT AND THE ANTICIPATED SOURCE OF THAT SUPPLY;

This Proposed Agreement will not depend on any fuel supply other than the renewable solar energy supply discussed above.

#### b. EXPLAIN WHETHER THE DEVELOPER HAS SECURED THE NECESSARY RIGHTS FOR WATER, FUEL(S), AND ANY OTHER REQUIRED INPUTS TO RUN THE PROJECT.

Water for the project will be obtained from the current landowner's water allocation from the Imperial Irrigation District (IID). The project will only use a fraction (~5%) of the landowner's water allocation.

#### c. ESTIMATED ANNUAL WATER CONSUMPTION OF THE FACILITY (GALLONS OF WATER/YEAR)

Water used at the Project will be required for panel washing, employee needs (potable water, sewer, etc.) and miscellaneous uses (dust control, landscaping, etc.). The bulk of the water will be used for panel washing. Actual water usage will depend on weather conditions and panel soiling. The Project estimates it will use a total of approximately 380 acre feet per year during operations. Approximately 350 acre feet per year of this is for cover crop irrigation (alternatively, a soil stabilizer may be used), and will be bought through the Imperial Irrigation District (IID) conventional agricultural customer procurement.

The remaining 30 acre feet per year will be used for panel washing, domestic use, landscape irrigation, and fire suppression (of O&M buildings only). The project is working to execute a Water Supply Agreement (WSA) with the IID through their Interim Water Supply Policy (IWSP) to supply this water for the operational life of the Project. Water will be delivered from the IID Wistaria Lateral 2 Canal adjacent to the Project site via a service pipe. The developers advise SDG&E that they have consulted the county and a wastewater permit will not be required.

#### d. CONFIDENCE THAT THE PROJECT WILL BE ABLE TO MEET THE TERMS OF THE CONTRACT GIVEN SDG&E'S INDEPENDENT UNDERSTANDING OF THE ADEQUACY OF THE ADDITIONAL FUEL OR ANY OTHER NECESSARY RESOURCE SUPPLY.

According to the Developer, the Project's water requirements are modest compared to most other generation technologies.

### C. DEVELOPMENT MILESTONES

#### 1. SITE CONTROL STATUS

##### a. SITE CONTROL TYPE (E.G. OWNERSHIP, LEASE, BLM, ETC.)

The Project will be located entirely on private lands. No BLM land is involved with the Project. Land control for the project consists of leases and land that will be purchased. The land that the project will be built on is privately owned by

three parties and is under options to purchase or buy thus giving the project site control. The landowners executed/recorded contracts providing for long term, exclusive options to purchase and/or lease of the parcels needed for the project site. The agreements were executed in Q3 2010 and Q1 2011.

**i. DURATION OF SITE CONTROL AND ANY EXERCISABLE EXTENSION OPTIONS (LEASE ONLY)**

The duration of site control for leases are for a term of 25-years. Most of the purchase and /or leases will be fully executed by the end of Q2 2012.

**ii. LEVEL OR PERCENT OF SITE CONTROL ATTAINED – IF LESS THAN 100%, DISCUSS SELLER’S PLAN FOR OBTAINING FULL SITE CONTROL**

Site control, in the form of long-term leases and land purchase options, has been obtained for 100% of the Mount Signal I Solar Project site. Land control has also been attained for 100% of the projects preferred gen-tie route.

**2. EQUIPMENT PROCUREMENT STATUS**

**a. STATUS OF THE PROCUREMENT OF MAJOR EQUIPMENT (E.G. EQUIPMENT IN-HAND, CONTRACTS EXECUTED AND EQUIPMENT IN DELIVERY, NEGOTIATING CONTRACTS WITH SUPPLIER(S), ETC.).**

AES Solar Power purchased and made cash payments for approximately 95MW of panels, 60MW of which AES Solar took delivery of in 2011 and 35MW of which will be delivered to AES Solar Power by mid-April, 2012 under a binding, written contract.

**b. THE DEVELOPER’S HISTORY OF ABILITY TO PROCURE EQUIPMENT.**

AES Solar utilizing the strength of its parents (AES) size and longevity in the energy sector has existing long term relationships established with vendors which give them the ability to procure the required equipment.

**c. IDENTIFIED EQUIPMENT PROCUREMENT ISSUES, SUCH AS LEAD TIME, AND THEIR EFFECT ON THE PROJECT’S DATE OF OPERABILITY.**

There is no identified equipment procurement issues related to this project.

**3. PERMITTING / CERTIFICATIONS STATUS**

**a. STATUS OF THE PROJECT’S RPS-ELIGIBILITY CERTIFICATION FROM THE CEC. EXPLAIN IF THERE IS ANY UNCERTAINTY REGARDING THE PROJECT’S ELIGIBILITY.**

The Mount Signal I Solar project’s CEC-RPS-1B Application for Pre-Certification California Renewables Portfolio Standard Program was approved by the CEC on January 18, 2011. The Pre-certification was based on the *Renewables Portfolio Standard Eligibility Guidebook, 4<sup>th</sup> Edition*, publication number CEC-300-2010-007-CMF and the project was assigned CEC-RP- ID Number 61292C There is no reason to believe that the final approval and issuance of a “Certification of

Eligibility for Renewables Portfolio Standard“ will be withheld by the CEC’s based on the project utilizing basic PV technology.

**b. THE FOLLOWING TABLE DESCRIBES THE STATUS OF ALL MAJOR PERMITS OR AUTHORIZATIONS NECESSARY FOR DEVELOPMENT AND OPERATION OF THE PROJECT.**

Permitting status and information is located in Confidential Appendix A, Project Development Status, paragraph C.3 - Permitting Status.

**4. PRODUCTION TAX CREDIT (PTC) / INVESTMENT TAX CREDIT (ITC) – IF APPLICABLE**

**a. THE PROJECT’S POTENTIAL ELIGIBILITY FOR TAX CREDITS BASED ON THE TECHNOLOGY OF THE PROJECT AND CONTRACT OPERATION DATE.**

Being a solar photovoltaic technology, the Mount Signal I Solar Project is eligible for the federal business energy Investment Tax Credit (“ITC”) available under 26 USC § 48 as expanded by both the *Energy Improvement and Extension Act of 2008* and *The American Recovery and Reimbursement Act of 2009* (“ARRA”). The Project is also eligible for the Cash Grant so long as construction is begun by December 31, 2011 or it has spent 5% of the eligible capital by that time.

**b. WHETHER THE DEVELOPER INTENDS TO SEEK PTCs/ITCs, ANY PLANS FOR OBTAINING THE PTCs/ITCs, AND ANY CRITERIA THAT MUST BE MET.**

The developer expects that the project will qualify for the Cash Grant based on spending 5% of eligible capital ahead of the December 31, 2011 deadline. And AES Solar Power will contribute panels of sufficient cost to the project to meet the Treasury’s requirement that at least 5% of project’s eligible costs will have been incurred in 2011.

**c. PARTY (SDG&E OR DEVELOPER) BEARING THE RISK IF THE ANTICIPATED TAX CREDITS ARE NOT OBTAINED.**

A discussion of the contractual terms and implications surrounding the anticipated Cash Grant is located in *Section D–PTC/ITC of Confidential Appendix A-Project Development Status*.

**5. TRANSMISSION**

**a. STATUS OF THE PROJECT’S INTERCONNECTION APPLICATION, WHETHER THE PROJECT IS IN THE CAISO OR ANY OTHER INTERCONNECTION QUEUE, AND WHICH TRANSMISSION STUDIES ARE COMPLETE AND/OR IN PROGRESS.**

The project is in CAISO generation Interconnection Queue as Active-Serial which is grandfathered upon completion of the network upgrades It has Full Capacity Deliverability Status as defined in the CAISO Tariff.

The Project has paid all applicable fees and deposits to the CAISO and SDG&E for interconnection of the generator to the SDG&E system at the 230 kV bus at Imperial Valley Substation. The project is located in CREZ 30 Imperial South in CAISO controlled grid and is considered a bundled in-state resource.

**b. STATUS OF THE INTERCONNECTION AGREEMENT WITH THE INTERCONNECTING UTILITY (E.G., DRAFT ISSUED, EXECUTED AND AT FERC, FULLY APPROVED).**

The Project has a completed LGIA which was executed in August 2009 and is currently being modified to include the following changes: location, technology and holding the existing queue position plus being updated for the new interconnection to the IV Sub.

**c. REQUIRED NETWORK AND GEN-TIE UPGRADES AND THE CAPACITY TO BE AVAILABLE TO THE PROJECT UPON COMPLETION, INCLUDING PROPOSED CURTAILMENT SCHEMES.**

The CAISO Studies identified interconnection work and network upgrades needed both to interconnect and deliver the project's output. More detail is provided in *Section E–Transmission of Confidential Appendix A–Project Development Status*.

**d. REQUIRED SUBSTATION UPGRADES OR CONSTRUCTION.**

Details about the CAISO Interconnection Study are provided in *Section E–Transmission of Confidential Appendix A–Project Development Status*.

**e. TIMING AND PROCESS FOR ALL TRANSMISSION-RELATED UPGRADES, INCLUDING CRITICAL PATH ITEMS AND POTENTIAL CONTINGENCIES IN THE EVENT OF DELAYS.**

Details about the CAISO Interconnection Study are provided in *Section E–Transmission of Confidential Appendix A–Project Development Status*.

**f. ISSUES RELATING TO OTHER GENERATING FACILITY PROJECTS IN THE TRANSMISSION QUEUE AS THEY MAY AFFECT THE PROJECT.**

Information about Mount Signal I Solar's position in the CAISO interconnection queue is provided in *Section E–Transmission of Confidential Appendix A–Project Development Status*

**g. DEPENDENCY ON TRANSMISSION THAT IS LIKELY TO BE CONGESTED AT TIMES, LEADING TO A PRODUCT THAT IS LESS THAN 100% DELIVERABLE FOR AT LEAST SEVERAL YEARS AND HOW SDG&E FACTORED THE CONGESTION INTO THE LCBF BID ANALYSIS.**

Congestion costs were calculated for this project as part of its LCBF assessment. See in *Section C.–Least-Cost Best-Fit of Confidential Appendix A–Consistency With Commission Decision and Rules* for more details on congestion costs.

**h. ALTERNATIVE TRANSMISSION ARRANGEMENTS AVAILABLE AND/OR CONSIDERED TO FACILITATE DELIVERY OF THE PROJECT'S OUTPUT.**

See *Section E–Transmission of Confidential Appendix A–Project Development Status* and *Confidential Appendix D–Contract Summary* for further discussion about the project's transmission arrangements.



**D. FINANCING PLAN****1. DEVELOPER'S MANNER OF FINANCING (E.G. PROJECT FINANCING, BALANCE SHEET FINANCING, UTILITY TAX EQUITY INVESTMENT, ETC.)**

Like most renewable projects, the Mount Signal I Solar Project plans to utilize a combination of debt and equity financing. See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for more detailed information about the projects financing plans.

**2. DEVELOPER'S GENERAL PROJECT FINANCING STATUS.**

See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for information about the projects financing plans.

**3. THE EXTENT (%) THE DEVELOPER RECEIVED FIRM COMMITMENTS FROM FINANCIERS (BOTH DEBT AND EQUITY), AND HOW MUCH FINANCING IS EXPECTED TO BE NEEDED TO BRING THE PROJECT ONLINE.**

See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for information about the projects financing plans.

**4. GOVERNMENT FUNDING OR AWARDS RECEIVED BY THE PROJECT.**

See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for information about the projects financing plans.

**5. CREDITWORTHINESS OF ALL RELEVANT FINANCIERS.**

See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for information about the projects financing plans.

**6. DEVELOPER'S HISTORY OF ABILITY TO PROCURE FINANCING.**

AES Solar and AES are experienced project developers. AESS has completed 9 financings for over \$660M. They have 142 MW of projects operation and 114 MW of projects under construction.

**7. PLANS FOR OBTAINING SUBSIDIES, GRANTS, OR ANY OTHER THIRD PARTY MONETARY AWARDS (OTHER THAN PRODUCTION TAX CREDITS AND INVESTMENT TAX CREDITS) AND HOW THE LACK OF ANY OF THIS FUNDING WILL AFFECT THE PROJECT.**

See *Section F–Financing Plan of Confidential Appendix A–Project Development Status* for information about the projects financing plans.

**IV. CONTINGENCIES AND/OR MILESTONES****A. MAJOR PERFORMANCE CRITERIA AND GUARANTEED MILESTONES.**

See *Confidential Appendix D-Contract Summary* and *Confidential Appendix F-Power Purchase Agreement* for performance standards, contingencies, and milestones associated with the Proposed Agreement.

**B. OTHER CONTINGENCIES AND MILESTONES**

**(I.E. 500 KV LINE, INTERCONNECTION COSTS, GENERATOR FINANCING, PERMITTING)**

See *Confidential Appendix D-Contract Summary* and *Confidential Appendix F-Power Purchase Agreement* for performance standards, contingencies, and milestones associated with the Proposed Agreement.

**V. PROCEDURAL MATTERS**

**A. REQUESTED RELIEF**

SDG&E respectfully requests that the Commission approve the Proposed Agreement through the adoption of a final Resolution approving this Advice Letter no later than May 10<sup>th</sup>, 2012.

As detailed in this Advice Letter, SDG&E's entry into the Proposed Agreement and the terms of such agreement are reasonable; therefore, all costs associated with the Proposed Agreement, including energy, green attributes, and resource adequacy should be fully recoverable in rates.

The Proposed Agreement is conditioned upon "CPUC Approval." SDG&E, therefore, requests that the Commission include the following findings in its Resolution approving the agreement:

1. The Proposed Agreement is 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 Proposed Agreement and the terms of such agreement are reasonable; therefore, the Proposed Agreement is approved in its entirety and all administrative and procurement costs associated with the Proposed Agreement, including for energy, green attributes, and resource adequacy, are fully recoverable in rates over the life of the Proposed Agreement, subject to Commission review of SDG&E's administration of the Proposed Agreement.
3. Generation procured pursuant to the Proposed Agreement 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 Proposed Agreement will contribute to SDG&E's minimum quantity requirement established in D.07-05-028.
5. Expected Project deliveries are eligible for any applicable RPS flexible compliance mechanisms.
6. The transaction qualifies as a Category 1 Bundled transaction.

**B. PROTEST**

Anyone may protest this Advice Letter to the California Public Utilities Commission. The protest must state the grounds upon which it is based, including such items as financial and service impact, and should be submitted expeditiously. The protest must be made in writing and received no later than March 25, 2012, which is 20 days from the date this Advice Letter was filed with the Commission. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

CPUC Energy Division  
Attention: Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102

Copies should also be sent via e-mail to the attention of Honesto Gatchallian (jnj@cpuc.ca.gov) and Maria Salinas (mas@cpuc.ca.gov) of the Energy Division. It is also requested that a copy of the protest be sent via electronic mail and facsimile to SDG&E on the same date it is mailed or delivered to the Commission (at the addresses shown below).

Attn: Megan Caulson  
Regulatory Tariff Manager  
8330 Century Park Court, Room 32C  
San Diego, CA 92123-1548  
Facsimile No. 858-654-1879  
*E-Mail: Mcaulson@semprautilities.com*

**C. EFFECTIVE DATE**

SDG&E believes that this Advice Letter is classified as Tier 3 (effective after Commission approval) pursuant to GO 96-B. SDG&E respectfully requests that the Commission issue a final Resolution approving this Advice Letter on or before May 10th, 2012.

**D. NOTICE**

In accordance with General Order No. 96-B, a copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties in R.11-05-005, by either providing them a copy electronically or by mailing them a copy hereof, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1879 or by e-mail to [SDG&ETariffs@semprautilities.com](mailto:SDG&ETariffs@semprautilities.com).

*(cc list enclosed)*

---

CLAY FABER  
Director – Regulatory Affairs

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:

ELC     GAS  
 PLC     HEAT     WATER

Contact Person: Joff Morales

Phone #: (858) 650-4098

E-mail: JMorales@semprautilities.com

### EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas  
PLC = Pipeline      HEAT = Heat    WATER = Water

(Date Filed / Received Stamp by CPUC)

Advice Letter (AL) #: 2332-E

Subject of AL: Request for Approval of Renewable Power Purchase Agreement with 82LV 8ME, LLC for the Mount Signal 1 Solar Farm

Keywords (choose from CPUC listing): Procurement, Power Purchase Agreement

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision / Resolution #:

N/A

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL<sup>1</sup>: N/A

Does AL request confidential treatment? If so, provide explanation: See Confidential Declaration

Resolution Required?  Yes  No

Tier Designation:  1  2  3

Requested effective date: 5/10/2012

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: See Table of Contents

Service affected and changes proposed<sup>1</sup>: N/A

Pending advice letters that revise the same tariff sheets: N/A

**Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:**

**CPUC, Energy Division**

**Attention: Tariff Unit**

**505 Van Ness Ave.,**

**San Francisco, CA 94102**

**mas@cpuc.ca.gov and jnj@cpuc.ca.gov**

**San Diego Gas & Electric**

**Attention: Megan Caulson**

**8330 Century Park Ct, Room 32C**

**San Diego, CA 92123**

**mcaulson@semprautilities.com**

<sup>1</sup> Discuss in AL if more space is needed.

General Order No. 96-B  
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission

DRA

S. Cauchois  
R. Pocta  
W. Scott

Energy Division

P. Clanon  
S. Gallagher  
H. Gatchalian  
D. Lafrenz  
M. Salinas

CA. Energy Commission

F. DeLeon  
R. Tavares

Alcantar & Kahl LLP

K. Harteloo

American Energy Institute

C. King

APS Energy Services

J. Schenk

BP Energy Company

J. Zaiontz

Barkovich & Yap, Inc.

B. Barkovich

Bartle Wells Associates

R. Schmidt

Braun & Blaising, P.C.

S. Blaising

California Energy Markets

S. O'Donnell  
C. Sweet

California Farm Bureau Federation

K. Mills

California Wind Energy

N. Rader

CCSE

S. Freedman  
J. Porter

Children's Hospital & Health Center

T. Jacoby

City of Chula Vista

M. Meacham  
E. Hull

City of Poway

R. Willcox

City of San Diego

J. Cervantes  
G. Lonergan  
M. Valerio

Commerce Energy Group

V. Gan

Constellation New Energy

W. Chen

CP Kelco

A. Friedl

Davis Wright Tremaine, LLP

E. O'Neill  
J. Pau

Dept. of General Services

H. Nanjo  
M. Clark

Douglass & Liddell

D. Douglass  
D. Liddell  
G. Klatt

Duke Energy North America

M. Gillette

Dynegy, Inc.

J. Paul

Ellison Schneider & Harris LLP

E. Janssen

Energy Policy Initiatives Center (USD)

S. Anders

Energy Price Solutions

A. Scott

Energy Strategies, Inc.

K. Campbell  
M. Scanlan

Goodin, MacBride, Squeri, Ritchie & Day

B. Cragg  
J. Heather Patrick  
J. Squeri

Goodrich Aerostructures Group

M. Harrington

Hanna and Morton LLP

N. Pedersen

Itsa-North America

L. Belew

J.B.S. Energy

J. Nahigian

Luce, Forward, Hamilton & Scripps LLP

J. Leslie

Manatt, Phelps & Phillips LLP

D. Huard  
R. Keen

Matthew V. Brady & Associates

M. Brady

Modesto Irrigation District

C. Mayer

Morrison & Foerster LLP

P. Hanschen

MRW & Associates

D. Richardson

OnGrid Solar

Andy Black

Pacific Gas & Electric Co.

J. Clark

M. Huffman  
S. Lawrie

E. Lucha

Pacific Utility Audit, Inc.

E. Kelly

R. W. Beck, Inc.

C. Elder

School Project for Utility Rate  
Reduction

M. Rochman

Shute, Mihaly & Weinberger LLP

O. Armi

Solar Turbines

F. Chiang

Sutherland Asbill & Brennan LLP

K. McCrea

Southern California Edison Co.

M. Alexander  
K. Cini

K. Gansecki

H. Romero

TransCanada

R. Hunter

D. White

TURN

M. Florio  
M. Hawiger

UCAN

M. Shames

U.S. Dept. of the Navy

K. Davoodi

N. Furuta

L. DeLacruz

Utility Specialists, Southwest, Inc.

D. Koser

Western Manufactured Housing  
Communities Association

S. Dey

White & Case LLP

L. Cottle

Interested Parties In:

R.11-05-005

San Diego Gas & Electric Advice Letter 2332-E  
March 5, 2012

## ATTACHMENT A

### DECLARATION OF E. BRADFORD MANTZ REGARDING CONFIDENTIALITY OF CERTAIN DATA

**BEFORE THE PUBLIC UTILITIES  
COMMISSION OF THE STATE OF CALIFORNIA**

**DECLARATION OF E BRADFORD MANTZ  
REGARDING CONFIDENTIALITY OF CERTAIN DATA**

I, E Bradford Mantz, do declare as follows:

1. I am an Energy Contracts Originator for San Diego Gas & Electric Company (“SDG&E”). I have reviewed Advice Letter 2332-E, requesting approval of a renewable Power Purchase & Sale Agreement (PPA) with 82LV 8ME, LLC for the Mount Signal I Solar Farm (with attached confidential and public appendices), dated March 5, 2012 (“Advice Letter”). I am personally familiar with the facts and representations in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or belief.

2. I hereby provide this Declaration in accordance with D.06-06-066, as modified by D.07-05-032, and D.08-04-023, to demonstrate that the confidential information (“Protected Information”) provided in the Advice Letter submitted concurrently herewith, falls within the scope of data protected pursuant to the IOU Matrix attached to D.06-06-066 (the “IOU Matrix”).<sup>1/</sup> In addition, the Commission has made clear that information must be protected where “it matches a Matrix category exactly or

---

<sup>1/</sup> The Matrix is derived from the statutory protections extended to non-public market sensitive and trade secret information. (See D.06-06-066, *mimeo*, note 1, Ordering Paragraph 1). The Commission is obligated to act in a manner consistent with applicable law. The analysis of protection afforded under the Matrix must always produce a result that is consistent with the relevant underlying statutes; if information is eligible for statutory protection, it must be protected under the Matrix. (See *Southern California Edison Co. v. Public Utilities Comm.* 2000 Cal. App. LEXIS 995, \*38-39) Thus, by claiming applicability of the Matrix, SDG&E relies upon and simultaneously claims the protection of Public Utilities Code §§ 454.5(g) and 583, Govt. Code § 6254(k) and General Order 66-C.



consists of information from which that information may be easily derived.”<sup>2/</sup>

3. I address below each of the following five features of Ordering Paragraph 2 in D.06-06-066:

- That the material constitutes a particular type of data listed in the Matrix,
- The category or categories in the Matrix to which the data corresponds,
- That it is complying with the limitations on confidentiality specified in the Matrix for that type of data,
- That the information is not already public, and
- That the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.<sup>3/</sup>

4. SDG&E’s Protected Information: As directed by the Commission, SDG&E demonstrates in table form below that the instant confidentiality request satisfies the requirements of D.06-06-066:<sup>4/</sup>

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
<p><i><b>Bid Information</b></i><sup>5</sup></p> <p><i><b>Locations:</b></i></p> <p><i><b>1. Confidential Appendix A</b></i></p> <ul style="list-style-type: none"> <li>▪ <i>(Section A, RPS Procurement plan, page 2)</i></li> <li>▪ <i>Section c LCBF pages 4-5</i></li> <li>▪ <i>How the project compares to other bids, paragraph C.</i></li> </ul>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p>	<p>The data provided is non-public bid data from SDG&amp;E’s Renewable RFOs.</p>
	<p>Identify the Matrix category or categories to which the data corresponds</p>	<p>This information is protected under IOU Matrix category VIII.A.</p>

<sup>2/</sup> See, Administrative Law Judge’s Ruling on San Diego Gas & Electric Company’s April 3, 2007 Motion to File Data Under Seal, issued May 4, 2007 in R.06-05-027, p. 2 (emphasis added).

<sup>3/</sup> D.06-06-066, as amended by D.07-05-032, *mimeo*, p. 81, Ordering Paragraph 2.

<sup>4/</sup> See, Administrative Law Judge’s Ruling on San Diego Gas & Electric Company’s Motions to File Data Under Seal, issued April 30 in R.06-05-027, p. 7, Ordering Paragraph 3 (“In all future filings, SDG&E shall include with any request for confidentiality a table that lists the five D.06-06-066 Matrix requirements, and explains how each item of data meets the matrix”).

<sup>5</sup> The confidential information referenced has a GREEN font color / has a green box around it in the confidential appendices.

<b>Data at issue</b>	<b>D.06-06-066 Matrix Requirements</b>	<b>How moving party meets requirements</b>
<p><i>(Portfolio Fit)- project ranking with other bids in the 2011 RPS RFO and application of TOD', page 5</i></p> <p><i>4. Transmission details, Page 48</i></p> <p><b>G.2 Projects PVC Scores, Page 49</b></p> <p><b>G.3 PVC Results , Page 50</b></p> <p><b>Appendix B -2011 Solicitation Overview., Page 51</b></p> <p><b>5. Confidential Appendix C – embedded project specific IE Report on p. 52.</b></p>	<p>Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data</p>	<p>In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&amp;E requests that this information be kept confidential until the final contracts from each of the RFOs have been submitted to the CPUC for approval.</p>
	<p>Affirm that the information is not already public</p>	<p>SDG&amp;E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.</p>
	<p>Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.</p>	<p>SDG&amp;E cannot summarize or aggregate the bid data while still providing project-specific details. SDG&amp;E cannot provide redacted or masked versions of these data points while maintaining the format requested by the CPUC.</p>
<p><b>Specific Quantitative Analysis<sup>6</sup></b></p> <p><b>Location:</b></p> <p><b>1. Confidential Appendix A</b></p> <p><b>a. C .LCBF Project Scores, Page 4-5</b></p> <p><b>b.Portfolio Fit Embedded Graphs , Page 5</b></p> <p><b>c. 3. Adders applied to LCBF analytical process, Page 7-10</b></p> <p><b>d.H. MPR, Page 44</b></p> <p><b>e.I.AMFs, Page 44</b></p> <p><b>f. Projects PVC Results ,Page 49-50</b></p>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p>	<p>This data is SDG&amp;E's specific quantitative analysis involved in scoring and evaluating renewable bids. Some of the data also involves analysis/evaluation of proposed RPS projects.</p>
	<p>Identify the Matrix category or categories to which the data corresponds</p>	<p>This information is protected under IOU Matrix categories VII.G and/or VIII.B.</p>
	<p>Affirm that the IOU is complying with the limitations on</p>	<p>In accordance with the limitations on confidentiality set forth</p>

<sup>6</sup> The confidential information referenced has a BLUE font color / has a blue box around it in the confidential appendices

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
<p>2. <i>Confidential Appendix C – embedded project specific IE Report on page 52</i></p> <p>3. <i>Confidential Appendix E 1, Page 66</i></p> <p>4. <i>Confidential Appendix E 1, Page 69</i></p> <p>5. <i>AMF Calculator , Page 70</i></p> <p>6. <i>Results page, Page 71</i></p> <p>7. <i>12.C how contract compares, Page 72</i></p>	<p>confidentiality specified in the Matrix for that type of data</p>	<p>in the IOU Matrix, SDG&amp;E requests that this information be kept confidential for three years.</p>
	<p>Affirm that the information is not already public</p>	<p>SDG&amp;E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.</p>
	<p>Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.</p>	<p>SDG&amp;E cannot summarize or aggregate the evaluation data while still providing project-specific details. SDG&amp;E cannot provide redacted or masked versions of these data points while maintaining the format requested by the CPUC.</p>
<p><b>Contract Terms<sup>7</sup></b></p> <p><b>Locations:</b></p> <p>1. <i>Confidential Appendix A</i></p> <ul style="list-style-type: none"> <li>▪ <i>D Standard Terms and Conditions, Page 11</i></li> <li>▪ <i>Standard Terms and Conditions Redline table , Page 12- 43</i></li> <li>▪ <i>K. PRG Participation and Feedback, page 44-45</i></li> <li>▪ <i>D. PTC/ITC, page 47</i></li> <li>▪ <i>3. Locationaal Atributes, Page 47-48</i></li> <li>▪ <i>Appendix D, Terms and Conditions of delivery ,Page 57</i></li> </ul>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p>	<p>This data includes specific contract terms.</p>
	<p>Identify the Matrix category or categories to which the data corresponds</p>	<p>This information is protected under IOU Matrix category VII.G.</p>
	<p>Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data</p>	<p>In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&amp;E requests that this information be kept confidential for three years.</p>
	<p>Affirm that the information is not already public</p>	<p>SDG&amp;E has not publicly disclosed this information and is not</p>

<sup>7</sup> The confidential information referenced has a **RED** font color / has a red box around it in the confidential appendices

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
<ul style="list-style-type: none"> <li>▪ <i>Major Contract Provision - matrixs, Page 57 – 65</i></li> <li>▪ <i>2. Controversial and or Major provisions not expressly identified in the matrix, Page 65</i></li> <li>▪ <i>2. Individual components of the contract pricing structure, Page 66</i></li> <li>▪ <i>\$. Price adjustments , Page 67</i></li> <li>▪ <i>Project characteristics, page 67</i></li> <li>▪ <i>AMF Calculator , Page 70</i></li> <li>▪ <i>Rate Impact ,Page 72</i></li> <li><b>2. Confidential Appendix E, page 3</b></li> <li><b>3. Confidential Appendix F, Page 74</b></li> </ul>	<p>Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.</p>	<p>aware that it has been disclosed by any other party.</p> <p>In order to include as much detail as possible, SDG&amp;E has provided specific contract terms instead of summaries. SDG&amp;E has provided summaries of certain contract terms in public portions of the testimony.</p>
<p><b><i>Analysis and Evaluation of Proposed RPS Projects<sup>8</sup></i></b></p> <p><b><i>Locations:</i></b></p> <p><b><i>1. Confidential Appendix A</i></b></p> <ul style="list-style-type: none"> <li>▪ <i>Consistency with commission Decisions and Rules section, Paragraph C.2.- Qualitative factors , Page 5- 6</i></li> <li>▪ <i>LCBF criteria and other</i></li> </ul>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p> <p>Identify the Matrix category or categories to which the data corresponds</p> <p>Affirm that the IOU is complying with the</p>	<p>The Commission has concluded that Actual Procurement Percentage data must be protected in order to avoid disclosing SDG&amp;E’s Bundled Retail Sales data.<sup>9/</sup></p> <p>This information is protected under IOU Matrix category VII.G.</p> <p>In accordance with the limitations on</p>

<sup>8</sup> The confidential information referenced has a VIOLET font color / has a violet box around it in the confidential appendices

<sup>9/</sup> *Id.*

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
<p><i>relevant criteria, page 10</i></p> <ul style="list-style-type: none"> <li>▪ <i>PRG participation and Feedback Paragraph K, page 44-45</i></li> <li>▪ <i>Development Milestones, Page 45-47</i></li> <li>▪ <i>Transmission, Page 47</i></li> <li>▪ <i>Financing Plan, Page 48-49</i></li> </ul>	<p>limitations on confidentiality specified in the Matrix for that type of data</p>	<p>confidentiality set forth in the IOU Matrix, SDG&amp;E requests that the “front three years” of this information be kept confidential.</p>
	<p>Affirm that the information is not already public</p>	<p>SDG&amp;E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.</p>
	<p>Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.</p>	<p>It is not possible to provide this data point in an aggregated, redacted, summarized or masked fashion.</p>
<p><i>IPT/APT Percentage<sup>10</sup></i></p> <p><b>Locations:</b></p> <ol style="list-style-type: none"> <li>1. <i>Confidential Appendix A- Consistency with Commission decisions and Rules section, paragraph A, this projects contribution numbers to SDG&amp;E’s RPS obligations, Page 4</i></li> <li>2. <i>Confidential Appendix D13, page 76</i></li> </ol>	<p>Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix</p>	<p>The Commission has concluded that since APT Percentage is a formula linked to Bundled Retail Sales Forecasts, disclosure of APT would allow interest parties to easily calculate SDG&amp;E’s Total Energy Forecast – Bundled Customer (MWH).<sup>11/</sup> The same concern exists with regard to IPT percentage.</p>
	<p>Identify the Matrix category or categories to which the data corresponds</p>	<p>This information is protected under IOU Matrix category V.C.</p>
	<p>Affirm that the IOU is</p>	<p>In accordance with the</p>

<sup>10</sup> The confidential information referenced has a AQUA font color / has a aqua box around it in the confidential appendices

<sup>11/</sup> See, *Administrative Law Judge’s Ruling on San Diego Gas & Electric Company’s April 3, 2007 Motion to File Data Under Seal*, issued May 4, 2007 in R.06-05-027; *Administrative Law Judge’s Ruling Granting San Diego Gas & Electric Company’s May 21, 2007 Amendment to April 3, 2007 Motion and May 22, 2007 Amendment to August 1, 2006 Motion*, issued June 28, 2007 in R.06-05-027.

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
	complying with the limitations on confidentiality specified in the Matrix for that type of data	limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that the “front three years” of this information be kept confidential.
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	It is not possible to provide these data points in an aggregated, redacted, summarized or masked fashion.

5. As an alternative basis for requesting confidential treatment, SDG&E submits that the Power Purchase Agreement enclosed in the Advice Letter is material, market sensitive, electric procurement-related information protected under §§ 454.5(g) and 583, as well as trade secret information protected under Govt. Code § 6254(k). Disclosure of this information would place SDG&E at an unfair business disadvantage, thus triggering the protection of G.O. 66-C.<sup>117</sup>

6. Public Utilities Code § 454.5(g) provides:

<sup>117</sup> This argument is offered in the alternative, not as a supplement to the claim that the data is protected under the IOU Matrix. California law supports the offering of arguments in the alternative. *See, Brandolino v. Lindsay*, 269 Cal. App. 2d 319, 324 (1969) (concluding that a plaintiff may plead inconsistent, mutually exclusive remedies, such as breach of contract and specific performance, in the same complaint); *Tanforan v. Tanforan*, 173 Cal. 270, 274 (1916) (“Since . . . inconsistent causes of action may be pleaded, it is not proper for the judge to force upon the plaintiff an election between those causes which he has a right to plead.”)

The commission shall adopt appropriate procedures to ensure the confidentiality of any market sensitive information submitted in an electrical corporation's proposed procurement plan or resulting from or related to its approved procurement plan, including, but not limited to, proposed or executed power purchase agreements, data request responses, or consultant reports, or any combination, provided that the Office of Ratepayer Advocates and other consumer groups that are nonmarket participants shall be provided access to this information under confidentiality procedures authorized by the commission.

7. General Order 66-C protects “[r]eports, records and information requested or required by the Commission which, if revealed, would place the regulated company at an unfair business disadvantage.”

8. Under the Public Records Act, Govt. Code § 6254(k), records subject to the privileges established in the Evidence Code are not required to be disclosed.<sup>12/</sup> Evidence Code § 1060 provides a privilege for trade secrets, which Civil Code § 3426.1 defines, in pertinent part, as information that derives independent economic value from not being generally known to the public or to other persons who could obtain value from its disclosure.

9. Public Utilities Code § 583 establishes a right to confidential treatment of information otherwise protected by law.<sup>13/</sup>

10. If disclosed, the Protected Information could provide parties, with whom SDG&E is currently negotiating, insight into SDG&E's procurement needs, which would

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<sup>12/</sup> See also Govt. Code § 6254.7(d).

<sup>13/</sup> See, D.06-06-066, *mimeo*, pp. 26-28.

unfairly undermine SDG&E's negotiation position and could ultimately result in increased cost to ratepayers. In addition, if developers mistakenly perceive that SDG&E is not committed to assisting their projects, disclosure of the Protected Information could act as a disincentive to developers. Accordingly, pursuant to P.U. Code § 583, SDG&E seeks confidential treatment of this data, which falls within the scope of P.U. Code § 454.5(g), Evidence Code § 1060 and General Order 66-C.

11. Developers' Protected Information: The Protected Information also constitutes confidential trade secret information of the developer listed therein. SDG&E is required pursuant to the terms of its original Power Purchase Agreement as amended to protect non-public information. Some of the Protected Information in the original Power Purchase and Sale Agreement as amended and my supporting declaration (including confidential appendices), relates directly to viability of the respective projects. Disclosure of this extremely sensitive information could harm the developers' ability to negotiate necessary contracts and/or could invite interference with project development by competitors.

12. In accordance with its obligations under its Power Purchase and Sale Agreement and pursuant to the relevant statutory provisions described herein, SDG&E hereby requests that the Protected Information be protected from public disclosure.



I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 5th day of March, 2012, at San Diego, California.

A handwritten signature in black ink, appearing to read 'E. Mantz', is written over a horizontal line.

E Bradford Mantz  
Energy Contracts Originator  
Electric and Fuel Procurement  
San Diego Gas & Electric

San Diego Gas & Electric Advice Letter 2332-E

March 5, 2012

## ATTACHMENT B

REQUEST FOR APPROVAL OF A RENEWABLE  
POWER PURCHASE AGREEMENT WITH 82LV 8ME, LLC  
FOR THE MOUNT SIGNAL 1 SOLAR FARM

### PUBLIC VERSION

(Distributed to Service List R.11-05-005)

**PART 2 \*CONFIDENTIAL APPENDICES OF ADVICE LETTER**

- Appendix A: Consistency with Commission Decisions and Rules and Project Development Status
- Appendix B: Solicitation Overview
- Appendix C: Final RPS Project-Specific Independent Evaluator Report
- Appendix D: Contract Summary
- Appendix E: \*\*\*\*\* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \*  
Pro Forma Power Purchase Agreement
- Appendix F: Power Purchase Agreement
- Appendix G: \*\*\*\*\* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\*
- Appendix H: Up-Front Showing Requirements for Category 1 Products

**PROTECTED INFORMATION WITHIN PART 2 OF THIS ADVICE LETTER IS IDENTIFIED WITH COLOR FONTS AND CATEGORIZED IN ACCORDANCE WITH THE CONFIDENTIALITY CODE SHOWN BELOW:**

**CONFIDENTIALITY KEY**

- VIOLET FONT = ANALYSIS AND EVALUATION OF PROPOSED RPS PROJECTS (VII.G)
- RED FONT = CONTRACT TERMS & CONDITIONS (VII.G)
- GREEN FONT = BID INFORMATION (VIII.A)
- BLUE FONT = SPECIFIC QUANTITATIVE ANALYSIS (VIII.B)
- BROWN FONT = NET SHORT POSITION (V.C)
- AQUA FONT = IPT/APT PERCENTAGES (V.C)

Confidential Appendix A

Consistency with Commission Decisions and Rules  
and Project Development Status

**This Confidential Appendix A**

- 1. Provides, where appropriate, confidential information necessary to fully answer any items in Part 1 of the advice letter.**
- 2. Provide answers to the additional items included in this Appendix A. To the extent such information is not confidential; it is included in the public version of the Advice Letter.**

## **Consistency with Commission Decisions and Rules**

### **A.RPS Procurement Plan**

SDG&E's 2011 RPS Plan was originally filed with the Commission on December 18, 2009. On April 14, 2011, the Commission issued Decision 11-04-030 conditionally approving SDG&E's 2011 RPS Plan and ordering that a Renewable Request for Offers ("RFO") be issued by SDG&E within seven days of filing amended RPS plans to conform to the Commission's directions in Decision 11-04-030. SDG&E issued the 2011 RPS RFO on May 12, 2011 and received bids from counterparties until July 11, 2011. Consistent with its RPS Plan, SDG&E launched the 2011 RFO with the goal of attracting bids from existing and developing renewable projects to deliver RPS-eligible renewable energy in order to enable SDG&E to continue to be compliant with State RPS requirements. With respect to determining need, SDG&E stated in its RPS Plan its intent to:

- \*\*\*\*\* \* \*\*\*\* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \* \* \* \* \*  
program requirements;
- Issue a renewable-only RFO in 2011 for projects that can deliver renewable power beginning in years 2011-2015; and
- Procure in excess of near-term annual RPS procurement goals in order to account for unanticipated project failures, delays or under-deliveries.<sup>1</sup>

The Proposed Agreement provides generation that will help to fulfil\* \* \* \* \*

On April 13, 2011, Governor Brown signed into law Senate Bill 2 from the First Extraordinary Session 2011-12 (SB2x1). This resulted in several major changes to the RPS program which directly affected SDG&E's ability to comply with RPS requirements. Two of these changes had the greatest impact upon the 2011 RPS RFO; the removal of flexible compliance mechanisms and the changing of near-term compliance targets from an annual target to an "average" annual target of 20% in a three-year period from January 1, 2011 to December 31, 2013 ("Compliance Period 1").

The combined effect of removing flexible compliance and setting an average target of 20% in 2011-13 required SDG&E to modify its compliance strategy, within the parameters of its approved RPS Plan. Without flexible compliance, SDG&E would find itself well short of the 20% goal, as SDG&E was able to procure only 11.9% of retail sales through existing contracts in 2010, and most of SDG&E's procurement efforts had been directed towards fulfilling the commitments to provide renewable power on the Sunrise Powerlink with contracted projects expected to start in the 2014-16 time frame. In 2011 SDG&E was able to procure through a  
\*\*\*\*\* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \*  
pass\* the \*20%\* RPS compliance target. .

As noted above, the Commission approved SDG&E's 2011 RPS Plan in D.11-04-030 and  
\*\*\*\*\* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \*  
requirements for RPS compliance in the 2011-13 period, the Commission issued no directives regarding substantial modification of the RFO structure (originally included in the draft 2009

<sup>1</sup> RPS Plan, pp. 4, 9 \*11. See also RPS Plan, pp. 3- \* \* \* \* \*  
removed from the RPS program . . . SDG&E would, in such a case, seek to procure as many short-  
\*\*\*\*\* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\* \* \* \* \* \*

RPS Plan) in order to comply with the new law. In order to account for the changes to the RPS program made by SB2x1, SDG&E applied certain additional qualitative and quantitative factors to bids received in the 2011 RFO that were not included in the original 2009 RPS Plan, but  
 \*\*\*\*\*  
 detailed above.

Part 1 of the Advice Letter provides a discussion of how the Proposed Agreement is consistent  
 \*\*\*\*\*  
 soliciting offers for renewable resources and resulting negotiations between 82LV 8ME, LLC (Mount Signal I Solar Farm) and SDG&E. From a least-cost best fit perspective, the Mount Signal I Solar Farm Proposed Agreement ranks very favorably when compared to other offers SDG&E shortlisted in 2011 RPS solicitations. The Proposed Agreement provides an opportunity for incremental RPS procurement of firm bundled deliveries from an existing facility beginning in 2012.

Part 1 of this Advice Letter demonstrates how the Proposed Agreement  
 \*\*\*\*\*  
 provides SDG&E an opportunity for incremental RPS procurement beginning as early as early Summer 2013.

**B. Bilaterals**

In D.06-10-019, the Commission concluded that bilateral contracts used for RPS compliance must be submitted for approval via advice letter and, while not subject to the MPR, must contain  
 \*\*\*\*\*  
 establishing price benchmarks and contract review processes for very short term (less than four years), moderately short term (at least 4 years, less than 10 yrs) and bilateral RPS contracts. Below, SDG&E reviews the Least Cost Best Fit evaluation used in the 2011 RPS RFO. This analysis confirms that the Proposed Agreement conforms to the price benchmarking requirements of D.06-10-019 and D.09-06-050.

**C. Least-Cost Best-Fit \*if applicable**

T\*\*\*\*\*

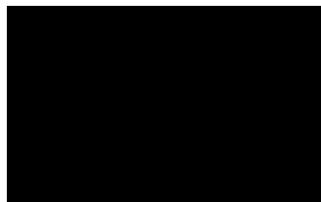
LCBF Criteria / Component		Project Score / Details	Notes
A	Levelized Contract Cost (\$/MWh)		
B	Project specific Price Referent (\$/MWh)		
C = A - B	Above Market Price (\$/MWh)		
D	Short-Term / Long-Term Adder (\$/MWh)		
E	Deliverability Adder (\$/MWh)		

F	Congestion Cost (\$/MWh)	[REDACTED]
F = C + D + E	TRCR Adder (\$/MWh)	
G = C + D + E + F	Bid Ranking Price (\$/MWh)	

**C. How the Project compares with other bids received in the solicitation with regard to each LCBF factor and why the submitted contract ranked higher (quantitatively and/or qualitatively) than the other bids using the LCBF criteria.**

- PORTFOLIO FIT**

A \* \* \* \* \*  
 quantitatively and qualitatively evaluated. Each is presented in this section. One of the strongest attributes of the project is its low contract price relative to other RPS offerings, and its ability to provide firm bundled energy, \* \* \* \* \*  
 LCBF Ranking for the 2011 RPS RFO with Mount Signal I Solar Farm added to the list.



- TRANSMISSION ADDER**

[REDACTED]

- APPLICATION OF TOD FACTORS**

[REDACTED]

- QUALITATIVE FACTORS**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

**3. The adders applied in the LCBF analytical process and the impact of those adders on the P\*\*\*\*\* \* \* \* \*\*\*\*\* \***

\* [REDACTED]

[REDACTED]

[REDACTED]

\* [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

| [REDACTED]

| [REDACTED]

| [REDACTED]

| [REDACTED]

[REDACTED]

[REDACTED]

| [REDACTED]

| [REDACTED]

[REDACTED] \*  
[REDACTED] \* \*  
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**4. How and why the Project's bid ranking changed after negotiations.**

[REDACTED]

**5. Using LCBF criteria and other relevant criteria, explain why the submitted contract was preferred relative to other shortlisted bids or other procurement options.**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**D. Standard Terms and Conditions**

Modifiable? (Yes/No)	STC No.	STANDARD TERM AND CONDITION	Modified? (Yes/No)	Description of Change and Rationale
<b>No</b>	1	CPUC Approval	No	Description: See STC Red-line Table Rationale: No Material Change
	2	RECs and Green Attributes	Yes	Description: See STC Red-line Table Rationale: No Material Change
	6	Eligibility	No	Description: See STC Red-line Table Rationale: No Material Change
	17	Applicable Law	No	Description: See STC Red-line Table Rationale: No Material Change
	REC-1	Transfer of RECs	Yes	Description: See STC Red-line Table Rationale: No Material Change
	REC-2	Tracking of RECs in WREGIS	No	Description: See STC Red-line Table Rationale: No Material Change
<b>Yes</b>	4	Confidentiality	█	██ ██
	5	Contract Term	█	██ ██
	7	Performance Standards/Requirements	█	██ ██
	8	Product Definitions	█	██ ██ ██
	9	Non-Performance or Termination Penalties and Default Provisions	█	██ ██
	12	Credit Terms	█	██ ██
	15	Contract Modifications	No	Description: See STC Red-line Table Rationale: No Material Change
	16	Assignment	█	██ ██
	18	Application of Prevailing Wages	No	Description: See STC Red-line Table Rationale: No Material Change

Note: Decision D.08-04-009 removed STC 3, stating:  
 \* \* \* \* \*entation of SB 1036, STC 3 has no continuing relevance and should be deleted  
 \* \* \* \* \*


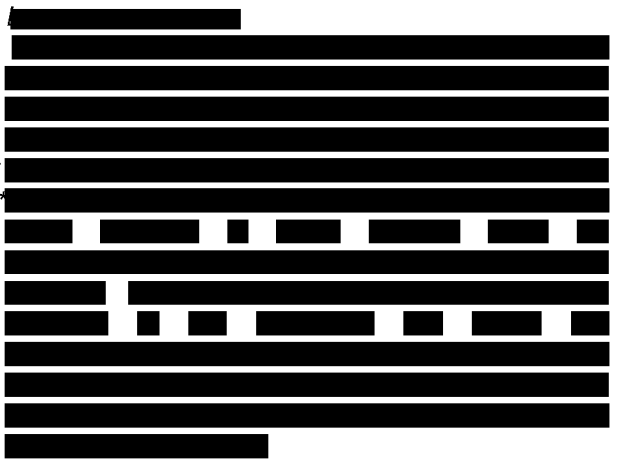
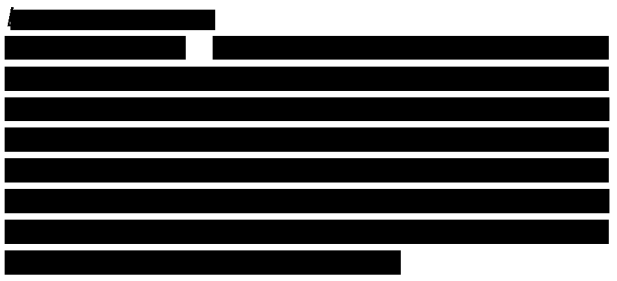

**Standard Terms & Conditions (STC) Red-line Table**

(Mark-up in right column is actual contract language relative to the standard modifiable term language)

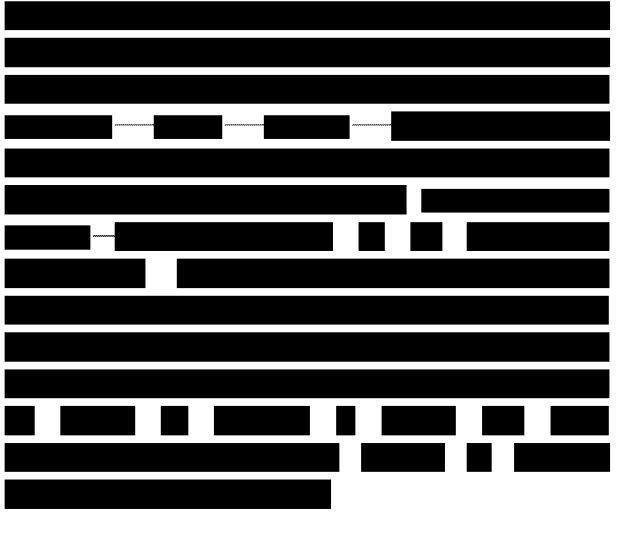

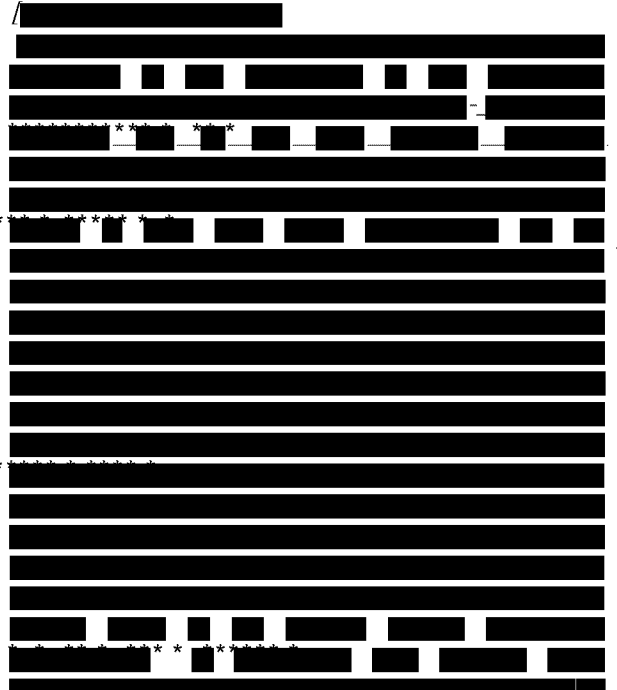
Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
<p><b>STC 1: CPUC Approval (Non-Modifiable)</b></p> <p>“CPUC Approval” means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:</p> <ul style="list-style-type: none"><li>(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer’s administration of the Agreement; and</li><li>(b) finds 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.</li></ul> <p>CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.</p>	<p><b>STC 1: CPUC Approval (Non-Modifiable)</b></p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted] :</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>
<p><b>STC 2: RECs and Green Attributes (Non-Modifiable)</b></p> <p>“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere;<sup>1</sup> (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green</p>	<p><b>STC 2: RECs and Green Attributes (Non-Modifiable)</b></p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p> <p>[Redacted]</p>

<sup>2</sup> [Redacted]

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
<p>Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other ***** ** * * * * * ***** * * * * * ***** * * * * *</p> <p>include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or ***** * * * * * that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.</p> <p><sup>1</sup> <i>Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.</i></p> <p><u>Green Attributes.</u> Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.</p>	<p>[REDACTED]</p>

<b>Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)</b>	<b>Parallel Term in SDG&amp;E *Mt Signal I Solar</b>
	
<b>STC 6: Eligibility (Non-Modifiable)</b>  Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource * * * * *  Section 399.12 or Section 399.16; a * * * * * output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.	<b>STC 6: Eligibility (Non-Modifiable)</b>  
<b>STC 17: Applicable Law (Non-Modifiable)</b>  Governing Law. This agreement and the rights and duties of the parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the state of California, without regard to principles of conflicts of law. To the extent enforceable at such time, each party waives its respective right to any jury trial with respect to any litigation arising under or in connection with this agreement.	<b>STC 17: Applicable Law (Non-Modifiable)</b>  
<b>STC REC-1: Transfer of Renewable Energy Credits (Non-modifiable)</b>  Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the renewable energy credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables	<b>STC REC-1: Transfer of Renewable Energy Credits (Non-modifiable)</b>  



<b>Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)</b>	<b>Parallel Term in SDG&amp;E *Mt Signal I Solar</b>
<p>Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.</p>	
<b>STC REC-2: Tracking of RECs in WREGIS. (Non-modifiable)</b>  Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.	<b>STC REC-2: Tracking of RECs in WREGIS. (Non-modifiable)</b>  / 
<b>STC 4: Confidentiality (Modifiable)</b>  Confidentiality: Neither Party shall disclose the non-public terms or conditions of this Agreement or any Transaction hereunder to a third party, other than (i) the ***** * ***** * ***** * ***** * advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclos***** * ***** * ***** * ***** * as defined in CPUC Decision (D.) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 10.12 of this Agreement; (v) in order to comply with any applicable law, regulation, or any exchange, control area or ISO rule, or order issued by a court or entity with competent jurisdiction ***** * ***** * ***** * ***** * to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 10.11 * ***** * ***** * ***** * ***** * practicable, use reasonable efforts: (i) to notify the other	<b>STC 4: Confidentiality (Modifiable)</b>  / 



<p><b>Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)</b></p>	<p><b>Parallel Term in SDG&amp;E *Mt Signal I Solar</b></p>
<p>* Non-standard Delivery shall be for a period of ___ years.</p> <p>*****_***** ***** *</p> <p>Parties need to apply to the CPUC justifying the need for non-standard delivery.</p>	<p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p>
<p><b>STC 7A: Performance Standards/Requirements (Modifiable)</b></p> <p>A. The following shall be included in the applicable post Commercial Operation Date performance standards/requirement provisions of the Agreement</p> <p>***** *</p> <p><i><b>NOTE: since this is an 'As-Available' contract only those performance STCs relating to As-Available deals will be covered here, i.e., 7A &amp; 7B</b></i></p> <p><b><u>Energy Production Guarantees</u></b></p> <p>The Buyer shall in its sole discretion have the right to declare an Event of Default if Seller fails to achieve the Guaranteed Energy Production in any [12 month period] [or] [24 month period] and such failure is not excused by the reasons set forth in subsections (ii), (iii), or (v) of</p> <p>***** *</p> <p>***** *</p> <p>Guaranteed Energy Production = _____ MWh. *</p>	<p><b>STC 7A: Performance Standards/Requirements (Modifiable)</b></p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p> <p>█ [REDACTED]</p>

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
	<p>[Redacted text block]</p>

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
	<p>[Redacted text block containing multiple lines of blacked-out text, some with asterisks (*)]</p>
<p><b>STC 7B: Performance Standards/Requirements (Modifiable)</b></p> <p>B. The following shall be included in the applicable performance standards/requirement provisions, as              *****</p>	<p><b>STC 7B: Performance Standards/Requirements (Modifiable)</b></p> <p>[Redacted text block]</p>



Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)

Parallel Term in SDG&E \*Mt Signal I Solar

vi. [the unavailability of landfill gas which was not anticipated as of the date this [Confirmation] was agreed to, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided; OR insufficient wind power for the specified units to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the specified

\*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \*  
 unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the date this [Confirmation] was agreed to, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.]

The performance of the Buyer to receive the Product may be excused only (i) during periods of Force Majeure, (ii) \*\*\* \*\* \* \*\*\*\*\* \* \* \* \* \* \*\* \*  
 perform or (iii) \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \* \* \* \*

[REDACTED]

\*\* \* \*\* \* \*  
 [REDACTED]

[REDACTED] t





Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
<p>*** ***** means, with respect to a Transaction, that Seller shall deliver to Buyer and Buyer shall purchase at the Delivery Point the Product from the Units, in accordance with the terms of this Agreement and subject to the excuses for performance specified in this ***** * *</p>	<p>[REDACTED]</p> <ul style="list-style-type: none"><li>■ [REDACTED]</li><li>■ [REDACTED]</li><li>■ [REDACTED]</li><li>■ [REDACTED]</li></ul> <p>[REDACTED]</p>
<p><b>STC 9: Non-Performance or Termination Penalties and Default Provisions (Modifiable)</b></p> <p>5.1 <u>Events of Default</u> * * * * * with respect to a Party (a * * * * * occurrence of any of the following:</p>	<p><b>STC 9: Non-Performance or Termination Penalties and Default Provisions (Modifiable)</b></p> <p>[REDACTED]</p> <p>[REDACTED]</p>





Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
<p>(ii) the failure of a Guarantor to make any payment required or to perform any other material covenant or obligation in any guaranty made in connection with this Agreement and such failure shall not be remedied within three (3) Business Days after written notice;</p>	<p>[REDACTED]</p>
<p>(iii) a Guarantor becomes Bankrupt; the failure of a Guarantor's guaranty to be in full force and effect for purposes of this Agreement (other than in accordance with its terms) prior to the satisfaction of all obligations of such Party under each Transaction to which such guaranty shall relate without the written consent of the other Party; or</p>	<p>[REDACTED]</p>
<p>(iv) a Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any guaranty."</p>	<p>[REDACTED]</p>
<p>(i) if at any time during the Term of Agreement, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement electrical power that was not generated by the Unit(s);</p>	<p>[REDACTED]</p>
<p>(j) failure to meet the performance requirements agreed to pursuant to Section __ hereof.</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>[REDACTED]</p>	<p>[REDACTED]</p>

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
	<p>[Redacted text block containing multiple paragraphs of blacked-out content]</p>



**Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)**

**Parallel Term in SDG&E – Mt Signal I Solar**

The definition of "Losses" shall be deleted in its entirety and replaced with the following:

" 'Losses' means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from the termination of a Terminated Transaction for the remaining term of such Transaction, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of the applicable Transaction and include value of Environmental Attributes."

The definition of "Costs" shall be deleted in its entirety and replaced with the following:

" 'Costs' means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with the termination of a Transaction."

The definition of "Settlement Amount" shall be adopted in its entirety as follows:



" 'Settlement Amount' means, with respect to a Transaction and the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such party incurs as a result of the liquidation of a Terminated Transaction pursuant to Section 5.2."

[REDACTED]

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
	<p>The text in this column is almost entirely redacted with black bars. It appears to be organized into several paragraphs, each starting with a redacted line followed by a few lines of text, and then a redacted line. There are some small gaps where the text is visible, but it is mostly obscured.</p>



Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
<p>Section 5.2 of the Agreement shall be deleted in its entirety and replaced with the following:</p> <p><u>*5.2 Declaration of Early Termination Date and Calculation of Settlement Amounts.</u> If an Event of Default with respect to a Defaulting Party shall have ***** * * * * * ***** * * * * * ***** * * * * * designate a day, no earlier than the day such notice is effective and no later than 20 days after such notice is effective, as an ***** * * * * * ***** * * * * * accelerate all amounts owing between the Parties and to liquidate and terminate all, but not less than all, ***** * * * * * ***** * * * * * *ties,* (i) *Withhold any payments due to the Defaulting Party under this Agreement and (iii) suspend performance. The Non-defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for each such Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages. The Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement ***** * * * * *</p>	<p>[REDACTED]</p>

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
	
<p>Section 5.3 through 5.5 of the Agreement shall be adopted in their entirety. For reference Section 5.3 * 5.5 are as follows:</p> <p>*5.3 <u>Net Out of Settlement Amounts.</u> The Non-Defaulting Party shall aggregate all Settlement Amounts into a single amount by: netting out (a) all Settlement Amounts that are due to the Defaulting Party, plus, at the option of the Non-Defaulting Party, any cash or other form of security then available to the Non-Defaulting Party pursuant to Article Eight, plus any or all other amounts due to the Defaulting Party under this Agreement against (b) all Settlement Amounts that are due to the Non-Defaulting Party, plus any or all other amounts due to the Non-Defaulting Party under this Agreement, so that all such amounts shall be netted out to a single liquidate** ***** **</p> <p>***** * If the *Non-*****</p> <p>Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero.</p>	

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)

Parallel Term in SDG&E \*Mt Signal I Solar

[Redacted]

[Redacted]

5.4 Notice of Payment of Termination Payment. As soon as practicable after a liquidation, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within two (2) Business Days after such notice is effective.

[Redacted]

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting  
\*\*\*\*\*

[Redacted]



**Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)**

**Parallel Term in SDG&E \*Mt Signal I Solar**

Option B: If requested by Party A, Party B shall deliver (i) within 120 days following the end of each fiscal year, a copy of the annual report containing audited consolidated financial statements for such fiscal year for the party(s) specified on the Cover Sheet and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of quarterly report containing unaudited consolidated financial statements for such fiscal quarter for the party(s) specified on the Cover Sheet. In all cases the statements shall be for the most recent accounting period and shall be prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as the relevant entity diligently pursues the preparation, certification and delivery of the statements.

[Redacted text]

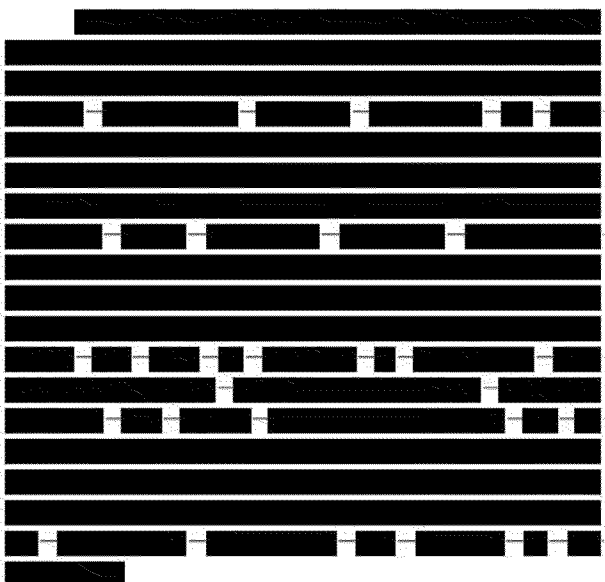
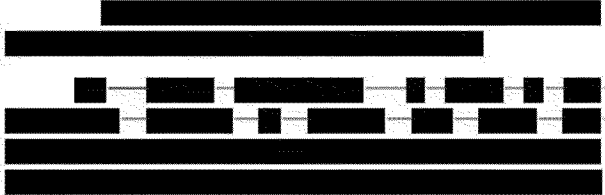
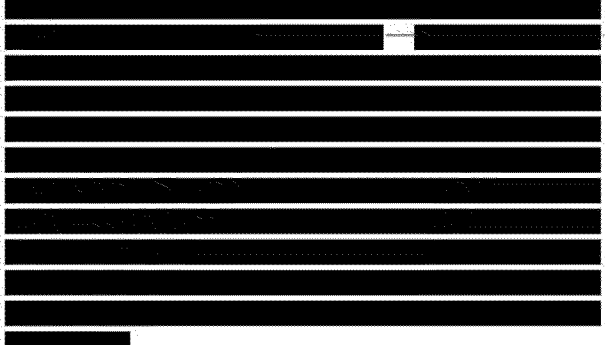

Option C: Party A may request from Party B the information specified in the Cover Sheet.

(b) Credit Assurances. If Party A has  
\*\*\*\*\* \* \*\*\*\*\* \* \*\* \* \*\*\*\*\* \* \*\*\*\*\*  
creditworthiness or performance under this Agreement has become unsatisfactory, Party A will provide Party B with written notice requesting Performance Assurance in an amount determined by Party A in a commercially reasonable manner. Upon receipt of such notice Party B shall have three (3) Business Days to remedy the situation by providing such Performance Assurance to Party A. In the event that Party B fails to provide such Performance Assurance, or a guaranty or other credit assurance acceptable to Party A within three (3) Business Days of receipt of notice, then an Event of Default under Article Five will be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.

[Redacted text]

(c) Collateral Threshold. If at any time and from time to time during the term of this Agreement (and notwithstanding whether an Event of Default has occurred), the Termination Payment that would be owed  
\*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \*  
exceeds the Party B Collateral Threshold, then Party A,

\*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \* \*\*\*\*\* \*

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
<p>on any Business Day, may request that Party B provide Performance Assurance in an amount equal to the amount by which the Termination Payment plus Party B's Independent Amount, if any, exceeds the Party B Collateral Threshold (rounding upwards for any fractional amount to the next Party B Rounding Amount) ("Party B Performance Assurance"), less any Party B Performance Assurance already posted with Party A. Such Party B Performance Assurance shall be delivered to Party A within three (3) Business Days of the date of such request. On any Business Day (but no more frequently than weekly with respect to Letters of Credit and daily with respect to cash), Party B, at its sole cost, may request that such Party B Performance Assurance be reduced correspondingly to the amount of such excess Termination Payment plus Party B's Independent Amount, if any, (rounding upwards for any fractional amount to the next Party B Rounding Amount). In the event that Party B fails to provide Party B Performance Assurance pursuant to the terms of this Article Eight within three (3) Business Days, then an Event of Default under Article Five shall be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.</p>	
<p>For purposes of this Section 8.1(c), the calculation of the Termination Payment shall be calculated pursuant to Section 5.3 by Party A as if all outstanding Transactions had been liquidated, and in addition thereto, shall include all amounts owed but not yet paid by Party B to Party A, whether or not such amounts are due, for performance already provided pursuant to any and all Transactions.</p>	
<p>(d) Downgrade Event. If at any time there shall occur a Downgrade Event in respect of Party B, then Party A may require Party B to provide Performance Assurance in an amount determined by Party A in a commercially reasonable manner. In the event Party B shall fail to provide such Performance Assurance or a guaranty or other credit assurance acceptable to Party A within three (3) Business Days of receipt of notice, then an Event of Default shall be deemed to have occurred and Party A will be entitled to the remedies set forth in Article Five of this Master Agreement.</p>	
<p>(e) If specified on the Cover Sheet, Party B shall deliver to Party A, prior to or concurrently with the execution and delivery of this Master Agreement a guaranty in an amount not less than the Guarantee Amount specified on the Cover Sheet and in a form</p>	







Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E – Mt Signal I Solar
<p>amounts are due, for performance already provided pursuant to any and all Transactions.</p> <p>(d) Downgrade Event. If at any time there shall occur a Downgrade Event in respect of Party A, then Party B may require Party A to provide Performance Assurance in an amount determined by Party B in a commercially reasonable manner. In the event Party A shall fail to provide such Performance Assurance or a guaranty or other credit assurance acceptable to Party B within three (3) Business Days of receipt of notice, then an Event of Default shall be deemed to have occurred and Party B will be entitled to the remedies set forth in Article Five of this Master Agreement.</p> <p>(e) If specified on the Cover Sheet, Party A shall deliver to Party B, prior to or concurrently with the execution and delivery of this Master Agreement a guarantee in an amount not less than the Guarantee Amount specified on the Cover Sheet and in a form reasonably acceptable to Party B.</p> <p>8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent either or both Parties deliver Performance Assurance hereunder, each Party (a "Pledgor") hereby grants to the other Party (the "Secured Party") a present and continuing security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, such Secured Party, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Secured Party's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence or deemed occurrence and during the continuation of an Event of Default or an Early Termination Date, the Non-Defaulting Party may do any one or more of the following: (i) exercise any of the rights and remedies of a Secured Party with respect to all Performance Assurance, including any such rights and remedies under law then in effect; (ii) exercise its rights of setoff against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the</p>	<p>[REDACTED]</p>





<b>Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)</b>	<b>Parallel Term in SDG&amp;E *Mt Signal I Solar</b>
	<p>[REDACTED]</p>
<b>STC 15: Contract Modifications (Modifiable)</b>  *Except to the extent herein provided for, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both parties. *	<b>STC 15: Contract Modifications (Modifiable)</b>  [REDACTED]
<b>STC 16: Assignment (Modifiable)</b>  *Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld; provided, however, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers and the financing provider(s) shall assume the payment and performance obligations provided under this Agreement with respect to the transferring Party provided, however, that in each such case, any such assignee shall agree in writing to be bound by the terms and conditions hereof and so long as the transferring Party delivers such tax and enforceability assurance as the non-transferring Party may reasonably request. *	<b>STC 16: Assignment (Modifiable)</b>  [REDACTED]

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar
	<p>[REDACTED]</p>
<p><b>STC 18: Application of Prevailing Wage (Modifiable)</b></p> <p>To the extent applicable, Seller shall comply with the prevailing wage requirements of Public Utilities Code section 399.14, subdivision (h).</p>	<p><b>STC 18: Application of Prevailing Wage (Modifiable)</b></p> <p>[REDACTED]</p>

Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)	Parallel Term in SDG&E *Mt Signal I Solar

**E. Unbundled Renewable Energy Credit Transactions:**

This Proposed Agreement is not an unbundled Renewable Energy Credit transaction.

**F. Minimum Quantity (if applicable)**

As described in Part 1 of the Advice Letter, the Proposed Agreement does not trigger the minimum quantity requirements set forth in D.07-05-028.

**G. Short-term Contract (if applicable)**

The Proposed Agreement is not a short term contract.

**H. MPR**

[REDACTED]

**I. AMFs**

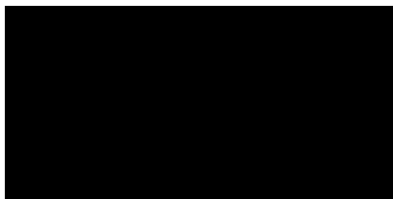
[REDACTED]

**J. Emissions Performance Standard**

Part 1 of the Advice Letter provides a discussion of how the Proposed Agreement complies with EPS requirements of D.07-01-039.

**K. PRG Participation and Feedback**

Part 1 of the Advice Letter provides a discussion of PRG briefings and feedback on the Proposed Agreement. [REDACTED]



**L. Independent Evaluator**

The Independent Evaluator, PA Consulting, was involved in the design and implementation of the 2011 RPS RFO process and evaluated bids for the 2011 RPS RFO. The Independent Evaluator also monitored the progress of negotiations between the parties and  
\*\*\*\*\*  
compared to other bids in the 2011 RPS RFO. *Confidential Appendix C* contains the Final RPS Project-Specific Independent Evaluator Report.

**Project Development Status**

**A. Company/Development Team**

*Section III.A* in Part 1 of this Advice Letter provides a discussion of the \*\*\*\*\*  
experience and successful projects owned, constructed and/or operated by the company.

**B. Technology**

1. TYPE AND LEVEL OF TECHNOLOGY MATURITY.

Solar photovoltaic technology has an extensive history of use in commercial power applications, and has been in use on the utility scale as per the description in *Section III.B.1* in Part 1 of this Advice Letter.

2. RESOURCE AND/OR AVAILABILITY OF FUEL

*Section III.B.2* in Part 1 of this Advice Letter provides a discussion regarding the adequacy of the resource.

**C. Development milestones**

1. SITE CONTROL



2. EQUIPMENT PROCUREMENT

[REDACTED]

3. PERMITTING STATUS

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]





3. LOCATIONAL ATTRIBUTES OF THE CONTRACT SUCH AS, CONGESTION RISK, IMPACT ON THE STATUS OF RUN MUST RUN (RMR) GENERATORS, AND RESOURCE ADEQUACY REQUIREMENTS.

[REDACTED]

[REDACTED] \*

[REDACTED]

4. TRANSMISSION DETAILS:

TRANSMISSION DETAILS	
QUEUE NUMBER (SPECIFY CONTROL AREA :CAISO,IID, ETC) AND RELATIVE POSITION	[REDACTED]
IF IN CAISO SERIAL GROUP, STATUS OF:	
FEASIBILITY STUDY	[REDACTED]
SYSTEM IMPACT STUDY	[REDACTED]
FACILITIES STUDY	[REDACTED]
IF IN CAISO CLUSTER:	
NAME OF CLUSTER	[REDACTED]
STATUS OF PHASE I AND II STUDIES	[REDACTED]
INTERCONNECTION AGREEMENT *DATE SIGNED OR ANTICIPATED	[REDACTED]
PREFERRED POINT OF INTERCONNECTION (LINE, SUBSTATION, ETC.)	[REDACTED]
EARLY INTERCONNECTION DETAILS, IF APPLICABLE	[REDACTED]
GEN-TIE TYPE (NEW LINE, RECONDUCTOR, INCREASED TRANSFORMER BANK CAPACITY, INCREASED BUS CAPACITY, INCREASED SUB AREA)	[REDACTED]
GEN-TIE LENGTH	[REDACTED]
GEN-TIE VOLTAGE	[REDACTED]

DEPENDENT NETWORK UPGRADE(S)	[REDACTED]
EXPECTED NETWORK UPGRADE COMPLETION DATE	[REDACTED]

**F. Financing Plan**

[REDACTED]

**G. Project Viability Calculator (PVC) \*not applicable if Project is commercially operational**

**1. MODIFICATIONS THAT WERE MADE TO THE PVC**

SDG&E did not make any modifications to the Energy Division issued PVC.

**2. THE PROJECT'S PVC SCORE RELATIVE TO OTHER PROJECTS ON THE SHORTLIST AND IN THE SOLICITATION (E.G. RELATION TO MEAN AND MEDIAN, ANY PROJECTS NOT SHORTLISTED WITH HIGHER PVC SCORES, ETC.). USE FIGURES FROM BID WORKPAPERS, AS APPROPRIATE.**

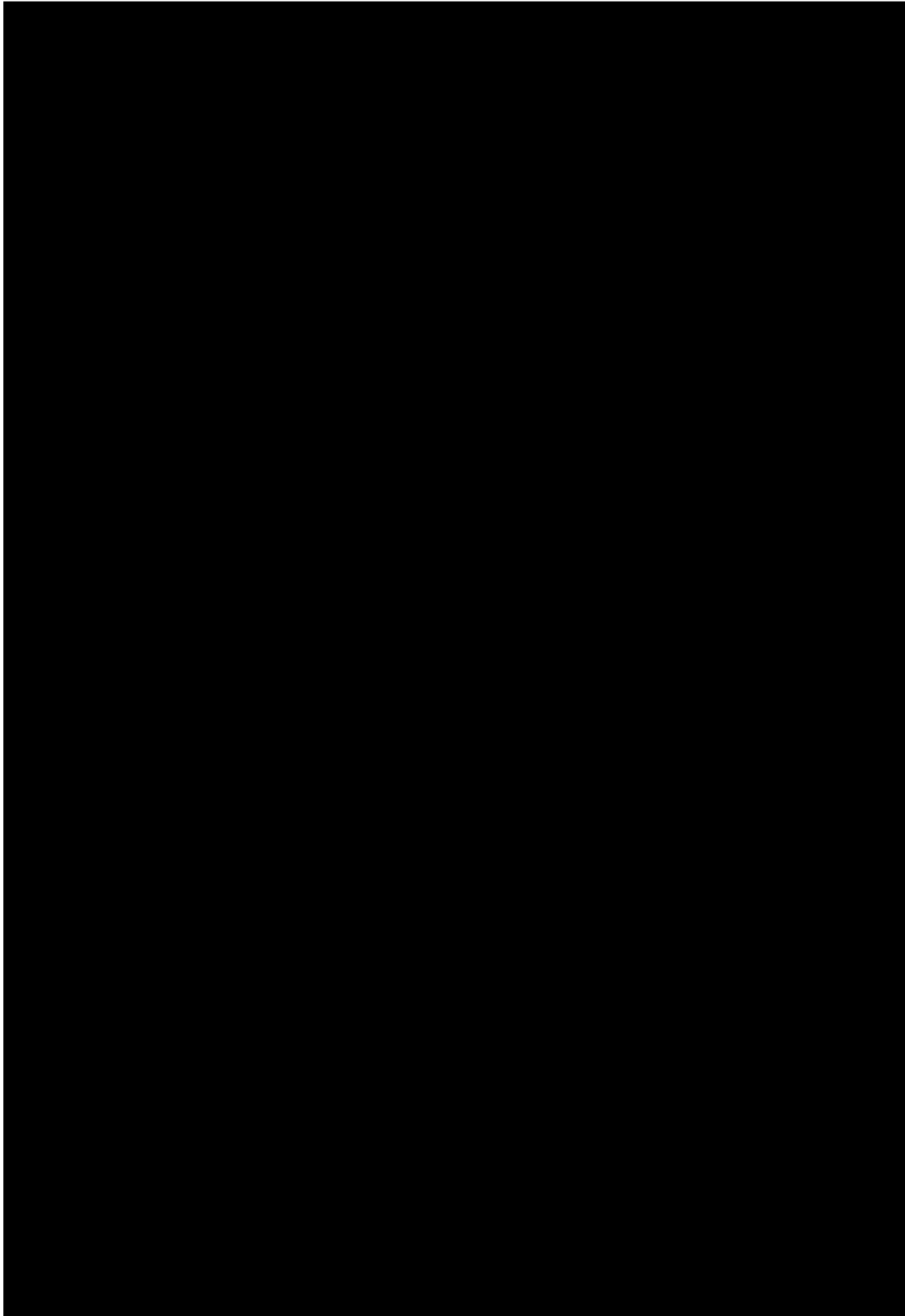
[REDACTED]

[REDACTED]

[REDACTED]

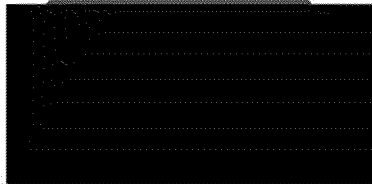
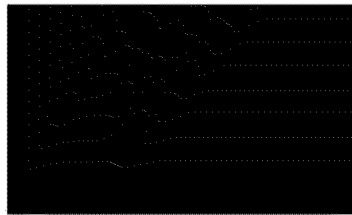
[REDACTED]

3. THE PROJECT'S PVC RESULTS



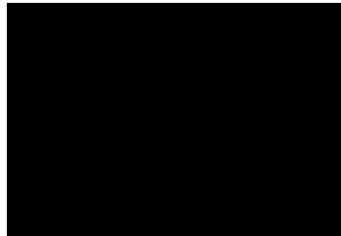
Confidential Appendix B  
2011 Solicitation Overview

**ATTACH IS SDG&E'S 2011 SOLICITATION OVERVIEW,  
SUBMITTED AS SECTION 3 OF SDG&E'S 2011 LCBF REPORT.**



Confidential Appendix C  
Final RPS Project-Specific Independent Evaluator Report

**ATTACHED IS THE FINAL, CONFIDENTIAL VERSION OF THE \*\* §  
PROJECT-SPECIFIC REPORT**



Confidential Appendix D

Contract Summary: Mount Signal I Solar Farm

**This Confidential Appendix D sets forth the information required to develop the Project contract summary.**

**Contract Summary**

**A. Site**

1. [REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] [REDACTED]  
[REDACTED] [REDACTED]

[REDACTED]  
[REDACTED]

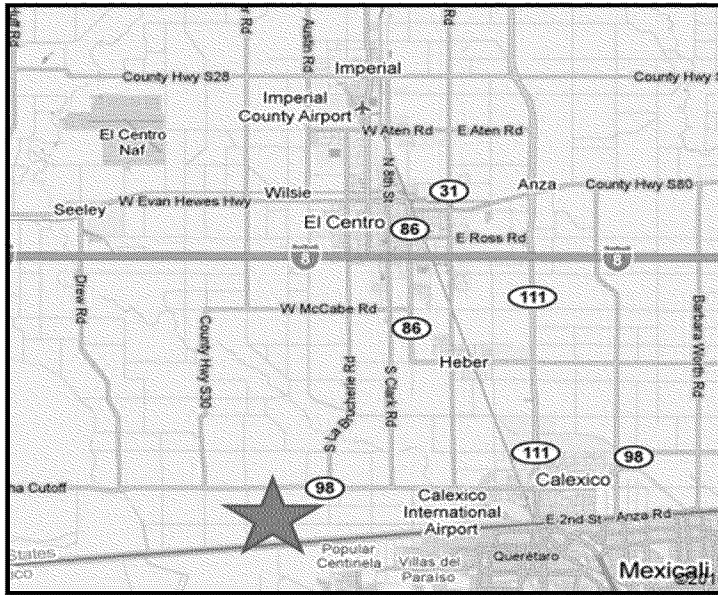
[REDACTED]

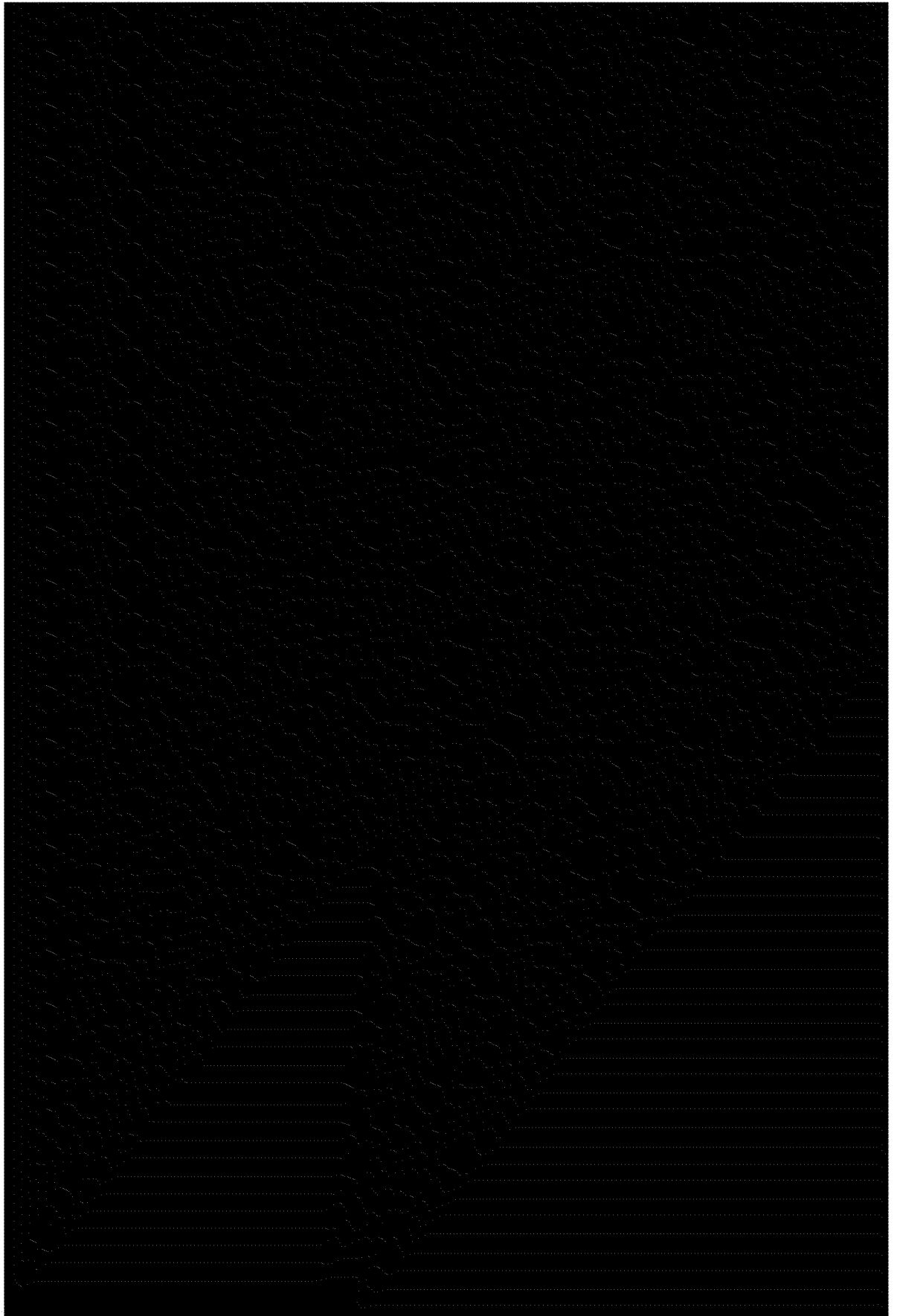
[REDACTED]



**2. General** \* \* \* \* \*

The site is generally located 3 miles west of the City of Calexico. A local map is attached below as well as a map showing the parcels of land that will make up the project







TERM/CONDITION	RPSC ONTRACT	
<b>CONDITIONS PRECEDENT AND DATE TRIGGERS</b>	[REDACTED]	
	[REDACTED] *	
	[REDACTED] *	
	[REDACTED] *	
	[REDACTED]	
	[REDACTED]	
	<b>AVERAGE ACTUAL PRICE (\$/MWH)</b>	[REDACTED]

TERM/CONDITION	RPSC ONTRACT
<b>PRODUCT TYPE</b>	
<b>KEY CONTRACT DATES</b> (INITIAL STARTUP DEADLINE, COMMERCIAL OPERATION DEADLINE, PTC DEADLINES, ETC.)	
<b>FIRMING/SHAPING                      REQUIREMENTS</b>	
<b>EXPECTED PAYMENTS</b>	
<b>SCHEDULING                      COORDINATOR</b>	
<b>ALLOCATION OF CAISO                      (OR OTHER CONTROL AREA)                      CHARGES</b>	
<b>ALLOCATION OF                      CONGESTION RISK</b>	
<b>PROJECT DEVELOPMENT                      SECURITY</b>	

TERM/CONDITION	RPSC ONTRACT
<b>DAILY DELAY DAMAGES</b>	[REDACTED]
	[REDACTED]
	[REDACTED]

TERM/CONDITION	RPSC ONTRACT
<b>SELLER-REQUIRED PERFORMANCE</b>	 A large block of text is completely redacted with black bars, covering the entire content of the 'RPSC ONTRACT' column for this section.
<b>SELLER PERFORMANCE ASSURANCES (CALCULATION METHODOLOGY, FORM OF PERFORMANCE ASSURANCE AND AMOUNT)</b>	 A large block of text is completely redacted with black bars, covering the entire content of the 'RPSC ONTRACT' column for this section.
<b>AVAILABILITY GUARANTEES</b>	 A single line of text is completely redacted with a black bar.

TERM/CONDITION	RPSC ONTRACT
<b>ENERGY DELIVERY REQUIREMENTS</b>	[REDACTED]
<b>LIQUIDATED DAMAGES / PENALTIES FOR FAILURE TO PERFORM</b>	[REDACTED]
<b>FORCE MAJEURE PROVISIONS</b>	[REDACTED]







TERM/CONDITION	RPSC ONTRACT
	<p>[REDACTED]</p>
<b>NO FAULT TERMINATION</b>	<p>[REDACTED]</p> <ul style="list-style-type: none"><li>• [REDACTED]</li><li>• [REDACTED]</li><li>• [REDACTED]</li></ul>
<b>SELLER § TERMINATION RIGHTS</b>	<p>[REDACTED]</p> <ul style="list-style-type: none"><li>• [REDACTED]</li><li>• [REDACTED]</li></ul>



**E. Contract Price**

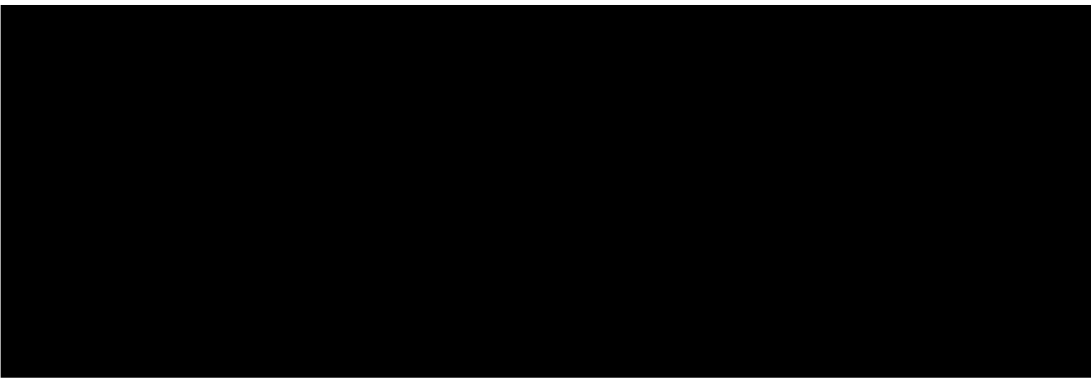
1. THE LEVELIZED CONTRACT PRICE USING \* \* \* \* \* S BEFORE TAX WEIGHTED AVERAGE COST OF CAPITAL DISCOUNT RATE IS INDICATED BELOW.

	PRICE	NOTES
LEVELIZED BID PRICE *INITIAL (\$/MWH)		
LEVELIZED BID PRICE *FINAL (\$/MWH)		
LEVELIZED CONTRACT PRICE *FINAL (\$/MWH)		
TOTAL SUM OF CONTRACT PAYMENTS		

2. THE INDIVIDUAL COMPONENTS OF THE CONTRACT PRICING STRUCTURE ARE AS FOLLOWS:

The energy payment is an all-in price and not broken into individual components.

- FLAT PRICING: [REDACTED]
- INDEXED PRICING: [REDACTED]
- ESCALATION FACTORS: [REDACTED]
- NON-AMFs SUBSIDIES: [REDACTED]
- OTHER: [REDACTED]



3. CONTRACT TERMS THAT PERMIT MODIFICATIONS TO THE CONTRACT PRICE.

NONE

4. PRICE ADJUSTMENTS/MODIFICATIONS REQUESTED OF THE DEVELOPER DURING THE NEGOTIATION PERIOD. PRICE ADJUSTMENTS/MODIFICATIONS REQUESTED OF THE UTILITY DURING THE NEGOTIATION PERIOD. REASON(S) FOR THE PRICE ADJUSTMENT(S). HOW THE INITIAL BID PRICE COMPARES TO THE FINAL CONTRACT PRICE.

[REDACTED]

5. PROJECT CHARACTERISTICS (E.G. NETWORK UPGRADE COSTS, EQUIPMENT COSTS, CHANGES IN CAPACITY FACTOR, ETC.) THAT COULD CHANGE THE CONTRACT PRICE AND THEIR EFFECT ON THE LEVELIZED CONTRACT PRICE.

[REDACTED]

6. FOR BIOMASS PROJECTS:

- a. WHAT LENGTH FUEL CONTRACT(S) HAS BEEN SIGNED, AND FOR HOW MANY YEARS OF THE PPA HAVE FUEL CONTRACT(S) BEEN SECURED?

The project will not depend on biomass fuel.

- b. DESCRIBE THE DEVELOPER \$ FORECASTED PRICE FOR FUEL SUPPLIES.

The project will not depend on biomass fuel.

- c. EXPLAIN HOW THE CONTRACT PRICE TAKES FUEL PRICE VOLATILITY INTO ACCOUNT.

The project will not depend on biomass fuel.

- d. EXPLAIN WHAT THE DEVELOPER PLANS TO DO IF FUEL SOURCE DISAPPEARS OR BECOMES MORE EXPENSIVE.

The project will not depend on biomass fuel.

7. THE FOLLOWING TABLE ESTIMATES/PROVIDES ALL APPLICABLE ASSUMPTIONS REGARDING DIRECT OR INDIRECT CONTRACT COSTS THAT ARE PART OF THE CONTRACT, BUT NOT INCLUDED IN THE CONTRACT \$\$/MWH PRICE.

[REDACTED]

8. INDIRECT EXPENSES [ARE/ARE NOT] BUILT INTO THE CONTRACT PRICE, PROVIDE:

- a. A CALCULATION THAT SUBTRACTS THE INDIRECT EXPENSES FROM THE CONTRACT \$ TOTAL ABOVE-MARKET COSTS, AND

[REDACTED]

b. A DESCRIPTION OF THE METHODOLOGY USED FOR THE CALCULATION.

[REDACTED]

9. FOR AN OUT-OF-STATE CONTRACT IN WHICH THE ENERGY WILL BE FIRMED AND SHAPED, THE TABLE BELOW IDENTIFIES ALL FIRMING AND SHAPING COSTS ASSOCIATED WITH THE PROJECT AND WHETHER THEY ARE INCLUDED IN THE CONTRACT PRICE. (IF THERE ARE MULTIPLE POTENTIAL DELIVERY OPTIONS, THE TABLE IDENTIFIES THE FIRMING AND SHAPING COSTS ASSOCIATED WITH EACH OPTION, AND A NARRATIVE BELOW EXPLAINS WHICH OPTION SDG&E EXPECTS IS THE MOST AND LEAST LIKELY.)

Not applicable – the project is not located out of state

10. RESULTS FROM THE ENERGY DIVISION'S AMFs CALCULATOR

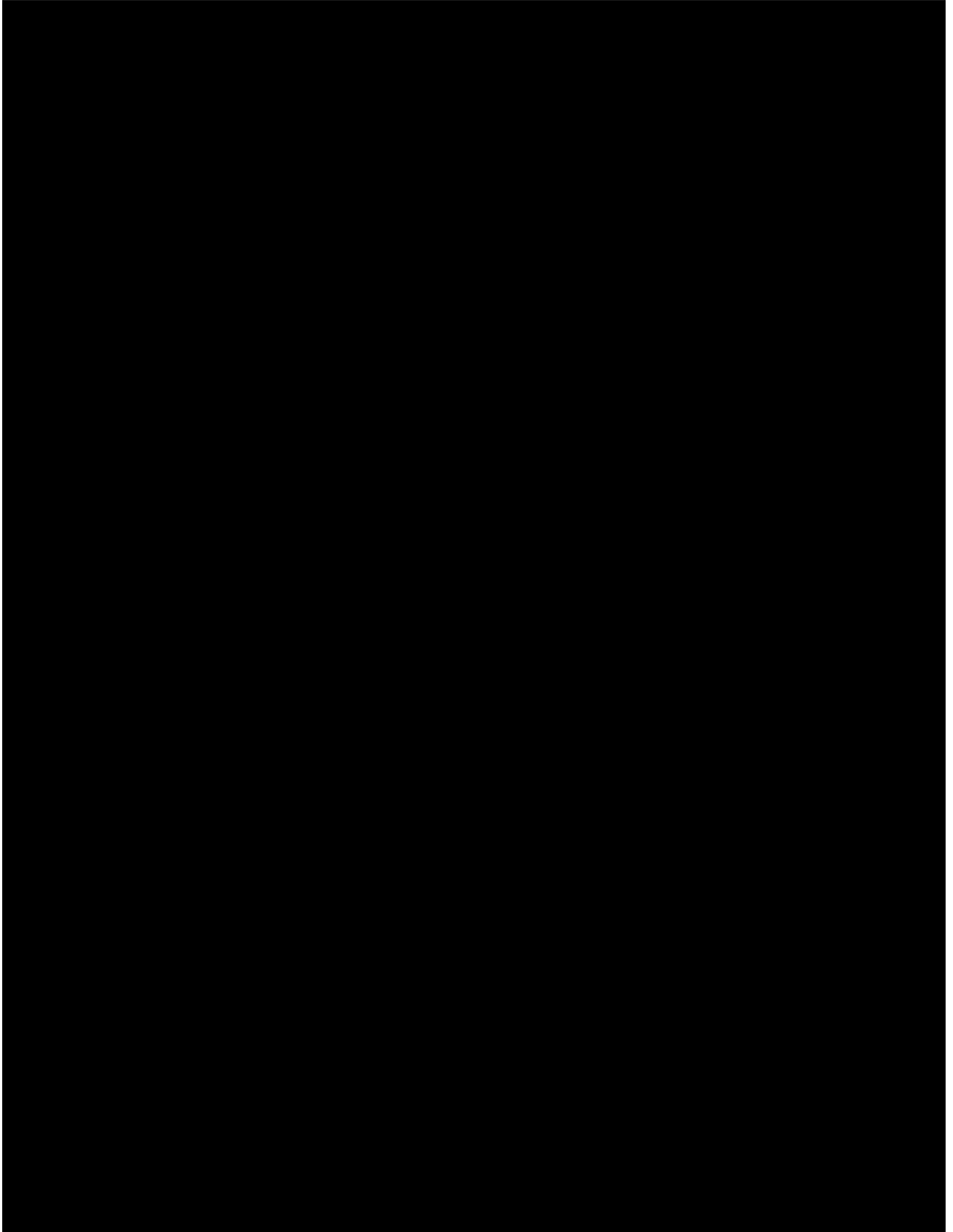
	(\$/MWH)	NOTES
LEVELIZED TOD-ADJUSTED CONTRACT PRICE	[REDACTED]	[REDACTED]
LEVELIZED TOD-ADJUSTED TOTAL CONTRACT COST (CONTRACT PRICE + FIRMING AND SHAPING)	[REDACTED]	[REDACTED]
LEVELIZED MPR	\$96.96	Base MPR for 2013 start for 25 year contracts
LEVELIZED TOD-ADJUSTED MPR	[REDACTED]	[REDACTED]
ABOVE-MPR COST (\$/MWH)	[REDACTED]	[REDACTED]
TOTAL SUM OF ABOVE-MPR PAYMENTS (\$)	[REDACTED]	[REDACTED]

**The file below contains the AMF Calculator for the Project**



**The following page displays the Results Tab from the AMF Calculator.**





**11. EXPLAINING WHICH MPR WAS USED FOR THE AMFs / COST CONTAINMENT CALCULATION (ONLY IF THE CONTRACT IS ELIGIBLE FOR AMFs).**

[REDACTED]

**12. HOW THE CONTRACT PRICE COMPARES WITH THE FOLLOWING:**

**a. OTHER BIDS IN THE SOLICITATION,**

[REDACTED]

**b. OTHER BIDS IN THE RELEVANT SOLICITATION USING THE SAME TECHNOLOGY,**

[REDACTED]

**c. RECENTLY EXECUTED CONTRACTS**

[REDACTED]

**d. OTHER PROCUREMENT OPTIONS (E.G. BILATERALS, UTILITY-SPECIFIC PROGRAMS, ETC.)**

**13. THE RATE IMPACT OF THE PROPOSED CONTRACT (CENTS PER KILOWATT-HOUR) BASED ON THE RETAIL SALES FOR THE YEAR WHICH THE PROJECT IS EXPECTED TO COME ONLINE.**

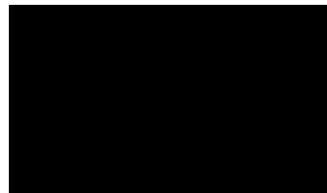
[REDACTED]

[REDACTED]

Confidential Appendix E

Comparison of Contract with  
SDG&E \* \* r\*Forma Power Purchase Agreement

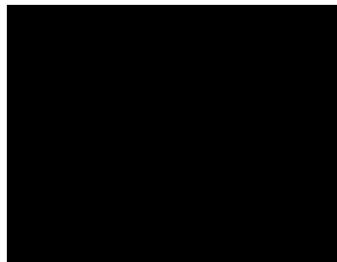
THE FILE ATTACHED BELOW IS A REDLINE OF THE CONTRACT AGAINST \* \* \* \* \* S COMMISSION-  
APPROVED PRO FORMA RPS CONTRACT.



Confidential Appendix F

Power Purchase Agreement

**THE FILE ATTACHED BELOW IS A COPY OF THE POWER PURCHASE AGREEMENT**

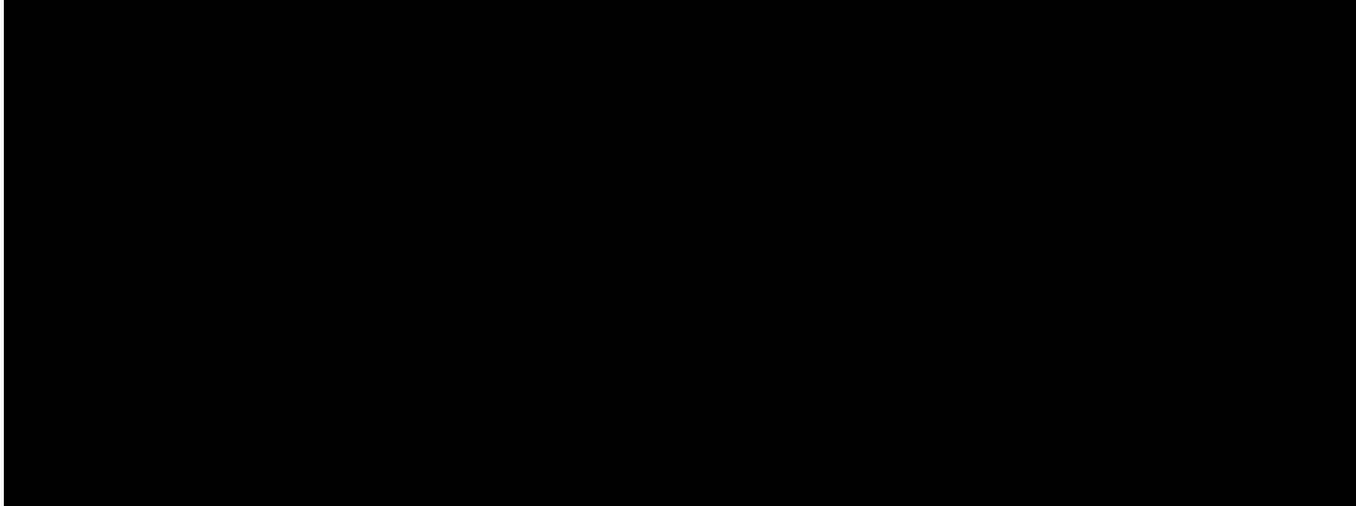


Confidential Appendix G

\*\*\*\*\* \* \* \* \*\*\*\*\* \* \*\*\*\*\* \* \* \* \* \* \*\*\*\*\*

\*\*\*\*\* \* \* \* \*\*\*\*\* \* \* \* \* \* \* \* \*

Project Name	Technology	COD	Location
Mount Signal I Solar Farm	Solar PV	12/31/2013	Imperial Valley, California



Confidential Appendix H

Up-Front Showing Requirements  
for Category 1 Products

**Up-Front Showing for Category 1 Products**

Category 1 Criteria	Explanation of How Product Meets Criteria
1. ERR first POI with:  a. WECC Transmission System within CBA boundaries  -OR-  b. distribution system within CBA boundaries	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2. Prove the product is bundled	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3. If using hourly scheduling into CA without substitution – hourly schedule can be maintained, substitution is unlikely	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
4. If using dynamic transfer:  a. There is a dynamic transfer agreement  b. Generation is included in agreement scope  c. Agreement will be in operation for duration of contract	[REDACTED] [REDACTED] [REDACTED]
5. Risk of actual deliveries not qualifying for expected product category	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]



	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
--	---

**Value Analysis**

	Expected Product Category	Other Product Category
Price Value, \$/MWh	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>
RPS Compliance Value:	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	<p>[REDACTED]</p>

San Diego Gas & Electric Advice Letter 2332-E  
March 5, 2012

## Public Version of the Project Specific IE Report

# San Diego Gas & Electric Co.

Preliminary Report of the Independent  
Evaluator on the 200 MW Mt Signal I Solar  
contract selected in the 2011 Request for  
Offers from Eligible Renewable Resources  
(2011 Renewable RFO)

February 28, 2012

# San Diego Gas & Electric Co.

Preliminary Report of the Independent  
Evaluator on the 200 MW Mt Signal I Solar  
contract selected in the 2011 Request for  
Offers from Eligible Renewable Resources  
(2011 Renewable RFO)

February 28, 201

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Prepared by:

Mason Smith  
Jonathan M. Jacobs  
Neha Batra

PA Consulting Group  
Suite 3840, 38th Floor,  
One California Plaza  
300 South Grand Avenue,  
Los Angeles, CA 90071, USA  
Tel: +1 213 689 1515  
Fax: +1 213 689 1129  
[www.paconsulting.com](http://www.paconsulting.com)

Version: 1.0

San Diego Gas & Electric Co. 2/28/12

**FOREWORD**

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This is PA Consulting Group's Independent Evaluator (IE) Report analyzing the contract between San Diego Gas & Electric Company (SDG&E) and 82LV 8ME, LLC (formed by 8minutenergy and AES Solar) for a 200 MW solar photovoltaic energy project. This project was bid into and shortlisted in SDG&E's 2011 Request for Offers from Eligible Renewable Resources (2011 Renewable RFO).

This report is based on PA Consulting Group's Preliminary Report on the 2011 RFO. The Preliminary Report addressed the conduct and evaluation of San Diego Gas & Electric Company's 2011 Renewables RFO through the selection of its preliminary short list. This report contains all the text of the Preliminary Report except for placeholder text in chapters 5 and 6. In the body of the report (that is, except for this Foreword), text from the Preliminary Report is in gray while new text is presented in black. This should help the reader identify the new text. This document has been formatted in accord with a template provided by Cheryl Lee of the CPUC Energy Division in an email dated Sept. 14, 2011.

This report contains confidential and/or privileged materials. Review and access are restricted subject to PUC Sections 454.5(g), 583, D.06-06-066, GO 66-C and the Confidentiality Agreement with the CPUC.

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## **1. ROLE OF THE INDEPENDENT EVALUATOR (IE)**

*Template language: "Describe the IE's role."*

This chapter describes the history of the requirements for Independent Evaluators at the Federal level and in California. It includes a list of the roles of the IE as well as a summary of PA's activities in fulfilling those roles.

### **1.1 THE IE REQUIREMENT**

*Template language: "Cite CPUC decisions requiring IE participation in RPS solicitations: D.04-12-048 (Findings of Fact 94-95, Ordering Paragraph 28) and D.06-05-039 (Finding of Fact 20, Conclusion of Law 3, Ordering Paragraph 8)."*

Regulatory requirements for an IE of resource procurement can be traced to the Federal Energy Regulatory Commission's (FERC's) "Opinion and Order...Announcing New Guidelines for Evaluating Section 203 Affiliate Transactions" (108 FERC ¶ 61,081 (2004)). That decision addressed ways to demonstrate that a utility's procurement of power from an affiliate was not abusive or unfair, under the standards of the *Edgar* decision (55 FERC ¶ 61,382 (1991)). FERC provided a set of guidelines, which presumably would be sufficient to demonstrate that the utility had not unfairly favored its affiliate. One of those guidelines was that "an independent third party should design the solicitation, administer bidding, and evaluate bids prior to the company's selection." FERC proposed not just independent evaluation but independent conduct of all aspects of the solicitation (except, presumably, the need determination).

The California Public Utilities Commission (CPUC) referenced those guidelines in its December 2004 decision on long-term resource procurement.<sup>1</sup> The CPUC stated that although it had not previously required the use of an IE for resource procurement, it would "require the use of an IE in resource solicitations where there are affiliates, IOU-built, or IOU-turnkey bidders" from that point forward.<sup>2</sup> The CPUC's intention was clearly that the IE should ensure that the utility did not favor itself, its affiliates or its shareholders (shareholders would earn a return on "ownership projects" – IOU-built or turnkey – but not on independent PPAs). The CPUC stated explicitly that it would not require the IE to conduct or administer the solicitation, nor would it "allow the IEs to make binding decisions on behalf of the utilities." Under this decision the role of the IE is to provide advice to the utility in "the design, administration, and evaluation aspects of the RFO" and to observe the utility's procurement and evaluation process in order to provide a fairness opinion.

D. 04-12-048 did not require IEs for procurements in which there were no affiliate or ownership bids. But in its decision approving the utilities' plans for 2006 Renewable Portfolio Standard (RPS) solicitations, the CPUC determined that Independent Evaluators would be required for these and "all future solicitations" (it is unclear whether this means only all future

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<sup>1</sup> California Public Utilities Commission, Decision (D.) 04-12-048, May 26, 2006, p. 135f and Findings of Fact 94-95 on pp. 219-220.

<sup>2</sup> D. 04-12-084, p. 135f and Ordering Paragraphs 26i and 28 on p. 245.



## 1. Role of the Independent Evaluator (IE)

RPS solicitations).<sup>3</sup> The role of the IE is still not to conduct or administer the solicitation but to “separately evaluate and report on the IOU’s entire solicitation, evaluation and selection process”.<sup>4</sup> The Decisions that approved the utility RPS solicitation plans for 2007 and 2008<sup>5</sup> did not further elaborate on the IE role but took the participation of an IE as a given.

D. 09-06-018, which approved the utility RPS solicitation plans for 2009, contained additional requirements related to the use of Project Viability Calculators and directed “that project-specific project viability information should be included in the confidential appendices to advice letters and validated by the IE in the confidential versions of IE reports.”<sup>6</sup> The reference to the Project Viability Calculator has been incorporated by Energy Division in its template language for Section 7, which is only completed in the final IE report submitted with each contract Advice Letter.

### 1.2 PA’S ROLE AS INDEPENDENT EVALUATOR

*Template language: “B. Description of key IE roles : IEs provide an independent evaluation of the IOU’s RPS bid evaluation and selection process:*

*“1. Did the IOU do adequate outreach to potential bidders and was the solicitation robust?”*

*“2. Was the IOU’s LCBF methodology designed such that all bids were fairly evaluated?”*

*“3. Was the IOU’s LCBF bid evaluation and selection process fairly administered?”*

*“4. Did the IOU make reasonable and consistent choices regarding which bids were brought to CPUC for approval?”*

In April 2006, SDG&E retained PA to be the Independent Evaluator for an All-Source Request for Offers (All-Source RFO). SDG&E anticipated that there might be affiliate bids in that RFO, as in fact there were. The CPUC Energy Division, as well as the rest of SDG&E’s Procurement Review Group (PRG), participated in the decision to select PA. PA’s contract was subsequently amended to include the independent evaluation of additional SDG&E procurement activities.

When PA was contracted as IE for the All-Source RFO, PA and SDG&E agreed on an interpretation of the IE role that would not include a complete LCBF evaluation or full replication of the utility’s computations, although PA would spot-check them. PA’s role would be that of an observer and an adviser as needed. PA subsequently served as Independent

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<sup>3</sup> California Public Utilities Commission, Decision (D.) 06-05-039, May 26, 2006, p. 46, Finding of Fact 20b on p. 78, Conclusion of Law 3e(2) on p. 82 and Ordering Paragraph 8 on p. 88.

<sup>4</sup> D. 06-05-039, p. 46.

<sup>5</sup> California Public Utilities Commission, Decision (D.) 07-02-011, Feb. 15, 2007 and Decision (D.) 08-02-008, Feb. 15, 2008. The decisions actually only conditionally approved the plans but the conditions were not connected with the use of IEs.

<sup>6</sup> California Public Utilities Commission, Decision (D.) 09-06-018, June 8, 2009, p. 24.

## 1. Role of the Independent Evaluator (IE)

Evaluator for SDG&E's 2006 Renewable RFO, the Local Peaker RFO (conducted in 2006-7), and the 2006, 2008 and 2009 Renewable RFOs. In each case, PA and SDG&E used the above interpretation of the IE role, and it was adopted for the 2011 Renewables RFO.

PA's emphasis has been on issues of fairness and equity. PA reviews the reasonableness of SDG&E's evaluation criteria and algorithms and spot-checks the calculations but does not enforce a single standard of evaluation. While PA may have an opinion about the "best" way to value certain attributes or even to conduct a multi-attribute evaluation, its role as IE has not been to judge SDG&E's evaluation against a standard, but rather to determine that SDG&E's evaluation has not unfairly favored affiliates or ownership bids, or favored SDG&E and its shareholders in any other way<sup>7</sup>.

For the 2009 RFO, SDG&E also asked PA to conduct the quantitative LCBF evaluation of bids, except for the congestion adder computation. This was a direct response to experience of past RFOs, and the efforts that SDG&E had to make to avoid any appearance of conflict in its evaluation of affiliate bids. PA also determined the TRCR clusters, and hence TRCR costs, in cases where the bidder had not specified them. PA's approach to conducting this evaluation was consistent with its approach to reviewing SDG&E's evaluation: the criteria to be applied were SDG&E's, not PA's, the spreadsheet model used to apply those criteria had been developed by SDG&E, and PA ensured that the criteria and model were reasonable and then applied them. PA did not itself determine the evaluation standards but PA did advise SDG&E on the definition and refinement of the evaluation criteria.

For the 2011 RFO, PA similarly conducted the LCBF evaluation, except that PA did not use SDG&E's spreadsheet model (which was linked to an Access database) but its own version (that was not linked to SDG&E's database).

### 1.3 PA'S ACTIVITIES

*Template language: "Description of activities undertaken by the IE to fulfill the IE's role (i.e. attended negotiation meetings, reviewed Request for Proposals materials, attended pre-bid conference, evaluated proposals and/or reviewed evaluation process and results, etc.) and reporting/consultation with CPUC, PRG and others."*

PA and SDG&E began to discuss plans for the 2011 RFO in December, 2009. SDG&E provided PA the draft RPS plan for review prior to its filing, and PA responded with a number of specific comments based on past experience. SDG&E and PA discussed several of these areas at length, most notably the use of a measure of avoided energy cost and the treatments of duration equivalence and capacity value. SDG&E adopted several of PA's suggestions and declined to adopt others. In all these cases SDG&E's decisions were reasonable (even if they were to disagree with PA).

---

<sup>7</sup> E.g., it would have been unfair for SDG&E to design an evaluation method that favored a category of bidders on whose behalf SDG&E would have to make extensive rate-based transmission or distribution investments.

## 1. Role of the Independent Evaluator (IE)

PA was provided access to all the SDG&E staff involved in the evaluation of the Renewables RFO. PA met with SDG&E to review the evaluation criteria and reviewed the LCBF model constructed by SDG&E.

PA was present at both pre-bidder conferences: in San Diego on June 2, 2011 and in El Centro on June 8, 2011. PA was provided all questions submitted by bidders either at the bidder conference or submitted by the July 1 deadline. PA met with SDG&E to discuss some questions received and how to best answer questions in a fair and concise manner. PA got a copy of all of SDG&E's answers and they are posted on the website. PA received the electronic bids from SDG&E in San Diego on the day bids were due.

PA was in regular contact with the SDG&E evaluation team and was provided all the data in the evaluation process. PA was responsible for interpreting all bids in order to conduct the LCBF evaluation. PA also reviewed questions put by SDG&E to bidders, and bidders' answers. PA advised SDG&E on judgments that certain bids did not conform to RFO requirements. PA participated in Procurement Review Group (PRG) meetings during the evaluation period. SDG&E discussed the short list with PA as well as with the PRG.

SDG&E in no way prevented PA from observing its process and analyzing its methods, and did not interfere with PA's conduct of the LCBF evaluation.

### 1.4 CONFIDENTIALITY AND ADDITIONAL COMMENTS

*Template language: "Any other relevant information or observations."*

It is PA's understanding that confidential treatment of the information in an IE report is obtained through procedures defined in CPUC Rulemaking (R.) 05-06-040.<sup>8</sup> Under that Ruling a person or party that serves testimony, supplies data or files an advice letter requests confidential treatment of some data within that submittal and must accompany the data by a declaration under penalty of perjury that justifies the claim of confidentiality.

PA delivers its IE report to SDG&E and SDG&E in turn submits it to the CPUC. It is PA's understanding that each utility separately submits its IE's report and requests confidential treatment for parts of that report. Because it is the utility that identifies confidential data and provides the associated declaration, PA believes that it is the utility's right to determine which data in the report is confidential and the utility's responsibility to defend that determination. SDG&E's view of confidentiality may be more or less expansive than PA's. While PA has in the past provided recommendations to SDG&E about which parts of its IE reports should be held confidential, in general PA takes a "minimal redaction" (redaction only of information about identifiable bids) view. SDG&E always makes the ultimate determination of data to redact.

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<sup>8</sup> "Administrative Law Judge's Ruling Clarifying Interim Procedures for Complying with Decision 06-06-066", August 22, 2006.

## **2. ADEQUACY OF OUTREACH AND ROBUSTNESS OF THE SOLICITATION**

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*Template language: "Did the IOU do adequate outreach to bidders and was the solicitation robust?"*

This chapter describes the information provided by the utility to potential bidders, and the utility's efforts to stimulate a wide and robust response to the RFO.

### **2.1 SOLICITATION MATERIALS**

*Template language: "Were the solicitation materials clear and concise to ensure that the information required by the utility to conduct its evaluation was provided by the bidders?"*

PA reviewed SDG&E's RFO and supporting forms. PA's opinion was that the RFO was clear and supporting forms were generally well-designed and would elicit appropriate information except for the "Capacity Buildout" table. This was an additional table, not present in previous years' bid forms, which SDG&E thought would help represent bids that came online in phases. After concluding the evaluation we do not believe that this table was useful in its present form.

SDG&E held two pre-bid conferences, in San Diego and El Centro, and also posted on its website answers to questions submitted by bidders. Even so, not all bidders entered data correctly and completely, but PA does not believe this was the fault of the forms.

### **2.2 ADEQUACY OF OUTREACH**

California's Renewable Procurement Standard and its utilities' attempts to meet that standard have been widely publicized. The investor-owned utilities have conducted annual RFOs for renewable resources for several years. Because of the publicity, it should not have been necessary for SDG&E to take on the responsibility of informing bidders that California has a renewables program or that utilities would be contracting with renewable suppliers. Furthermore, it was well-known in the California energy industry that at the time of the adoption of the RPS, SDG&E was the furthest of the three utilities from satisfying the RPS (least renewable energy relative to retail sales). It would have been adequate for SDG&E to advertise the RPS solicitation on its website and to a sizable email list.

In PA's opinion, SDG&E did adequate outreach. SDG&E provided PA with a list of 877 email addresses, associated with 655 separate organizations, to which it sent the RFO. Some of those addresses are consultants probably not working with any particular bidder. In addition, SDG&E publicized the RFO with a press release and notices appeared in *Platt's MW Daily* and *California Energy Markets*.

### **2.3 SOLICITATION ROBUSTNESS**

PA judges the robustness of the solicitation by the number of bids received. In PA's opinion, the solicitation engendered a robust response. ■ separate organizations responded to the solicitation with a total of ■ project proposals having ■ pricing options. That is ■ times as many projects, and ■ times as many pricing options, as were submitted in SDG&E's 2009 RFO.

## 2. Adequacy of outreach and robustness of the solicitation

The CPUC has encouraged SDG&E to do specific outreach to the Imperial Valley and, more generally, the SPL area. ■ project proposals were submitted from the SPL area, with ■ pricing options, from a total of ■ separate bidders.<sup>9</sup>

### 2.4 FEEDBACK

*Template language: "Did the IOUs seek adequate feedback about the bidding/bid evaluation process from all bidders after the solicitation was complete?"*

SDG&E did not formally seek bidder feedback.

### 2.5 ADDITIONAL ISSUES

*Template language: "Any other relevant information or observations"*

SDG&E originally filed its Renewables Procurement Plan on Dec. 18, 2009. The CPUC review of the utilities' plans was lengthy and plans had to be brought into compliance with new policies such as those regarding Tradable RECs and buyer-directed economic curtailment. The three IOUs filed various revisions and amendments to their plans, with the last utility amendment having been filed in June, 2010. The Commission issued Decision (D.) 11-04-030 conditionally accepting the plans on April 20, 2011, and SDG&E made its compliance filing on May 4.

In the time between SDG&E's initial RPS Plan filing and the actual release of the RFO on May 12, 2011, SDG&E's perception of its RPS need changed somewhat. Partly this was due to the failure of several previously signed contracts, such as Tessera Imperial Valley Solar, but the most significant impact on SDG&E's thinking (as explained to PA) was the enactment of the Renewable Energy Resources Act (SBX1-2). Previously, section 399.14(a)(2)(C)(i) of the Public Utilities Code had required the CPUC to have rules that allowed utilities to "apply ... inadequate procurement in one year to no more than the following three years." The CPUC's approach was to permit utilities to " earmark" later deliveries from specific contracts to be applied against a renewables procurement deficit. SBX1-2 deleted that language.

■ . It interpreted SBX1-2 as prohibiting that strategy, and shared this interpretation with the PRG. SDG&E was therefore faced with a greater-than-anticipated need for renewable energy in 2012 and 2013, which it planned to meet by buying Renewable Energy Credits and emphasizing, in its 2011 RFO, contracts with significant deliveries before December 31, 2013.

In its May 4 compliance filing, SDG&E made minimal changes to its plan and attachments (including the draft RPS RFO), only as directed by D.11-04-030. Adding a statement to the RFO emphasizing early delivery would not have been a compliance change. It was therefore necessary for SDG&E to communicate this emphasis to bidders more directly. At PA's suggestion, SDG&E sat for an interview with *California Energy Markets* to describe its

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<sup>9</sup> For each bid, PA determined (if possible) the TRCR "cluster" to which it corresponded. "SPL bids," as counted here, are those PA identified as belonging to clusters SDGE2 and SDGE3.



### **3. SDG&E'S METHODOLOGY FOR BID EVALUATION AND SELECTION**

---

Template language: "Was the IOU's LCBF methodology designed such that bids were fairly evaluated?"

This chapter describes SDG&E's quantitative evaluation methodology and PA's opinion of its application.

#### **3.1 PRINCIPLES USED TO EVALUATE METHODOLOGY**

Template language: "Identify the principles the IE used to evaluate the IOU's bid evaluation methodology. Example principles (each IE should include the specific principles he/she used in his/her evaluation):

- "1. The IOU bid evaluation should be based only on information submitted in bid proposal documents.
- "2. There should be no consideration of any information that might indicate whether the bidder is an affiliate.
- "3. Procurement targets and objectives were clearly defined in IOU's solicitation materials.
- "4. The IOU's methodology should identify quantitative and qualitative criteria and describe how they will be used to rank bids. These criteria should be applied consistently to all bids.
- "5. The LCBF methodology should evaluate bids in a technology-neutral manner.
- "6. The LCBF methodology should allow for consistent evaluation and comparison of bids of different sizes, in-service dates, and contract length."

PA has used the following principles to guide its evaluation. These principles were originally codified by PA in its report on SDG&E's 2006 RPS RFO:<sup>11</sup>

- The evaluation should only be based on those criteria requested in the response form. There should be no consideration of any information that might indicate whether the bidder is an affiliate.
- The methodology should identify how quantitative measures will be considered and be consistent with an overall metric.
- The approach should not be biased for or against specific technologies, solely based on the choice of technology (as opposed to, e.g., quantifiable differences between the value of peaking and baseload technologies).

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<sup>11</sup> Jacobs, Jonathan M., *Preliminary Report of the Independent Evaluator on the 2006 Request for Offers from Eligible Renewable Resources (Renewable RFO)*, PA Consulting Group, Los Angeles CA, January 16, 2007, p. 2-1.

### 3. SDG&E's methodology for bid evaluation and selection

- The methodology does not have to be the one that the IE would independently have selected but it needs to be “reasonable”.

These principles do not require the upfront identification of procurement targets, as those may depend on committed contract quantities and commitments may be made between release of the RFO and selection of the shortlist. They do not also specifically address “consistent” evaluation of bids of different sizes and timing because PA considers the fairness of such analysis to fall within the area of reasonableness; and it is conceivable that a consistent evaluation may not be the most reasonable.

#### 3.2 SDG&E'S LCBF METHODOLOGY

*Template language: “Briefly describe the IOU's LCBF methodology. Does the methodology incorporate the comparison of bids based on price, value, need and viability?”*

In the final version of its 2011 Renewables Procurement Plan, SDGE characterized its LCBF methodology as being based on a Bid Ranking Price that included four quantitative factors:<sup>12</sup>

1. Above Market Cost (AMC), which equals the levelized amount by which the Contract Cost exceeds a measure of energy and capacity value
2. Transmission upgrade costs or credits
3. Estimated congestion costs
4. Deliverability adder

Shortly before bids were received, SDG&E and PA reviewed the bid evaluation model and discussed SDG&E's need forecast. At that time SDG&E indicated it intended to include another term in the Bid Ranking Price, applicable only to bids delivering in CP1:

5. Near Term Long Term (NLT) Adder

SDG&E called it the “Short Term Long Term Adder” although, but PA noted some confusion among PRG members owing to that name. Therefore this report refers to it as a Near Term, rather than Short Term, adder.

The next five subsections describe the four numbered components of the Bid Ranking Price listed above. SDG&E abandoned the “duration equalization” approach from previous RPS RFOs, and incorporated an MPR proxy as a measure of value, and somewhat changed the way it computed a deliverability adder. The sixth subsection addresses the reasonableness of those changes; we address the appropriateness of the NLT adder in section 3.2.5.

PA's opinion of the use of LCBF methodology is included in section 3.3.

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<sup>12</sup> San Diego Gas & Electric Company, *2011 Renewables Procurement Plan Compliance Filing*, May 4, 2011, Appendix C, p. 3.



### 3.2.1 Above market cost (AMC)

The benefit or value sought from RPS-qualified energy is in its renewability. The cost of that energy also includes “energy value” and “capacity value”. The AMC component describes the cost of renewability, assuming that the contract provides both energy and capacity. It is computed as the amount paid for the contract, minus the cost of energy and capacity that could be avoided through purchase of the contracted energy. The deliverability adder (described below) corrects this in the case of contracts that do not provide full capacity value.

In its RPS RFOs SDG&E has consistently chosen not to compute an “avoided cost” or “market price” by hour or subperiod to be compared with contract costs. In 2011, SDG&E used a proxy for the approved Market Price Referent (MPR), along with its approved TOD factors, to estimate the avoided cost. SDG&E was unable to use an approved MPR, because the most recent MPR values were from 2009.<sup>13</sup> The proxy is the levelized price produced by the CPUC’s MPR model, with updated commodity price assumptions.

Bidders were able to specify a uniform contract price throughout the year, or a price that was adjusted by TOD factors. The difference between contract payment and the weighted MPR was volume-weighted and levelized to produce this component of the ranking costs. The following equation describes the computation:

AMC =

$$\frac{\sum_{y=1}^N CP_y Cap_y + \sum_{i=1}^6 (p_y - TOD_i MPR(start, dur)) v_{y,i}}{\sum_{y=1}^N \sum_{i=1}^6 v_{y,i}} \frac{1}{(1+d)^y} \quad \text{for uniform pricing}$$

$$\frac{\sum_{y=1}^N CP_y Cap_y + \sum_{i=1}^6 (TOD_i p_y - TOD_i MPR(start, dur)) v_{y,i}}{\sum_{y=1}^N \sum_{i=1}^6 v_{y,i}} \frac{1}{(1+d)^y} \quad \text{for TOD-weighted pricing}$$

where  $p_y$  is the energy bid price in year  $y$ ,  $CP_y$  is the capacity bid price in year  $y$ ,  $TOD_i$  is SDG&E’s current TOD factor for subperiod  $i$ ,  $Cap_y$  is the projected contract capacity in year  $y$ ,  $v_{y,i}$  is the projected contract deliveries in year  $y$ , subperiod  $i$ ,  $MPR(start, dur)$  is the proxy MPR for a contract of duration  $dur$  starting in year  $start$  (as computed by the CPUC’s MPR model with updated assumptions), and  $d$  is the discount rate (SDG&E WACC).

These formulas applied to power purchase agreement bids. A TREC bid provides not energy and hence gets no avoided cost benefit. Therefore:

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<sup>13</sup> 2011 MPR values were contained in CPUC Draft Resolution E-4442, as received by email Oct. 31, 2011, which has not yet been approved. After SBS1-2 becomes effective (Dec. 10, 2011) the CPUC may no longer compute the MPR.

### 3. SDG&E's methodology for bid evaluation and selection

AMC (TREC) =

$$\frac{\sum_{y=1}^N \sum_{i=1}^6 p_y v_{y,i}}{\sum_{y=1}^N \sum_{i=1}^6 v_{y,i}} \bigg/ (1+d)^{-y} \quad \text{for uniform pricing}$$

$$\frac{\sum_{y=1}^N \sum_{i=1}^6 TOD_i p_y v_{y,i}}{\sum_{y=1}^N \sum_{i=1}^6 v_{y,i}} \bigg/ (1+d)^{-y} \quad \text{for TOD-weighted pricing}$$

#### 3.2.2 Estimated costs of transmission network upgrades or additions

For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E's model calculated costs for transmission network upgrades or additions, using the information provided through the TRCRs. SDG&E considered using estimates from completed CAISO Phase II interconnection studies, but few projects submitted those estimates. Furthermore, recent interconnection estimates, especially for projects in the Imperial Valley and even the SDG&E local area, have been quite high. PA therefore recommended that the interconnection study cost estimates, which are really upper bounds on interconnection costs, were not appropriate for use for comparative evaluation. On the other hand, the TRCRs themselves were over 18 months old, having been submitted in January, 2010 -- there was no really good source of transmission upgrade cost information.

If a bidder identified the cluster to which a project belonged, the transmission cost corresponded to the cost of the first plant in that cluster according to the utility's TRCR. If the bidder had not identified the cluster, PA applied its judgment to determine the cluster based on the project location and interconnection information, and then sought SDG&E's input as a check.<sup>14</sup> Projects outside of the California ISO were expected to have internalized the cost of transmission to the ISO, as well as the cost of required transmission upgrades outside the ISO, into their bid price; they could still be assigned additional upgrade costs within California based on the TRCRs. For example, the cost estimate for cluster SDGE4 was used as the CAISO upgrade cost adder for projects delivering at Palo Verde.

#### 3.2.3 Estimated congestion costs

Congestion impacts from the proposed point of delivery to SDG&E's load aggregation point were determined after LCBF rankings had been computed without congestion information. In this way SDG&E was able to reduce the number of projects for which congestion impacts were computed. PA agreed that it was reasonable for SDG&E's transmission planning group

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<sup>14</sup> SDG&E pointed out that PA had misinterpreted the definition of the SDGE2 cluster, thinking it had been comparable to a cluster in the 2009 TRCR.

### 3. SDG&E's methodology for bid evaluation and selection



to conduct the study given the separation from the procurement group provided for under the FERC Code of Conduct. Congestion adders were all relatively small and therefore congestion costs did not affect the composition of the short list.

#### 3.2.4 Deliverability adder

The deliverability adder represents the amount by which the avoided cost of the contract should have been reduced if it did not provide deliverable capacity; alternatively it is amount by which the AMC (section 3.2.1) should be increased for contracts that don't provide deliverable capacity. SDG&E computed it using its MPR proxy and the difference between "all-in" and "energy-only" TOD factors.

In previous years SDG&E had used "energy-only" TOD factors that represented only the relative value of energy in different subperiods. In 2009 the CPUC directed SDG&E to use "all-in" TOD factors in the future.<sup>15</sup> "All-in" factors account also for the additional capacity value associated with energy in peak hours. We have already noted that the (levelized) value of energy + capacity in a peak hour would be estimated as  $TOD_{peak}MPR(start, dur)$ . The value of energy alone would be estimated using an energy only (EO) TOD factor, as  $TOD_{peak}^{EO}MPR(start, dur)$ . The previous (2009) TOD factors were used as energy-only factors. Thus the "full capacity value" that was assumed to come from a contract was estimated as:

Full capacity value =

$$\frac{\sum_{y=1}^N \sum_{i=1}^6 \max(TOD_i, TOD_i^{EO}) \cdot MPR(start, dur) v_{y,i}}{\sum_{y=1}^N \sum_{i=1}^6 v_{y,i}} \cdot (1+d)^{-y}$$

The "max" function limits the value calculation to those periods where the all-in TOD factors exceed the energy-only factors.

The full capacity value is included in the "avoided cost" that is subtracted in calculating the AMC, and therefore must be added back to the extent the contract fails to be deliverable. SDG&E and PA agreed on the following rules.

Delivery adder =

- 0 For TRECs (no avoided cost)
- 0 For PPAs where the plant is in SDG&E territory or the Imperial Valley, and will have a CAISO full deliverability interconnection
- 40% of full capacity value For PPAs where the plant is not in SDG&E territory or the Imperial Valley, but will have a CAISO full deliverability interconnection

<sup>15</sup> D. 11-04-030, pp. 46-47.

### 3. SDG&E's methodology for bid evaluation and selection

40% of full capacity value	For PPAs where the plant is outside CAISO
Full capacity value	For PPAs where the plant has a CAISO energy-only interconnection

These rules imply that a plant in California that does not have a full deliverability interconnection provides no capacity value, although plants outside California are assumed to have firm delivery to the border (and hence capacity value); and non-local plants are only 60% as valuable as local ones (like saying that system RA is only 60% of the value of local + system RA).

#### 3.2.5 Near Term Long Term (NTLT) adder

Under SBX1-2, instead of having to achieve an annual renewables penetration level, utilities have to achieve that level on average over several years. For example, SDG&E has to obtain 20% of its total sales from 2011-2013 from renewable sources. SDG&E characterized its total need for additional renewable energy in that period in three ways:

- The *nominal need*, based on the assumption that all signed contracts succeed, was [REDACTED] from 2011-2013
- The *probability-weighted need*, which assigns a nonzero failure probability to contracted plants not yet operational, was [REDACTED] from 2011-2013
- The *contingent need*, based on adding a 25% contingency to the probability-weighted need, was 4 [REDACTED] MWh from 2011-2013.

SDG&E's intention was to shortlist enough projects to meet the contingent need, and contract with at least the probability weighted need.

On the other hand, SDG&E already had a number of additional contracts with plants slated to come on line after 2013, even though some of those contracts had not yet been approved by the CPUC. In estimating its need over the years 2014-2016 (for which the RPS target is 25% of sales) SDG&E focused on the year 2016 and determined that

- The *nominal need* for the single year 2016 was [REDACTED]
- The *probability-weighted need* for the single year 2016 was [REDACTED]
- The *contingent need* for the single year 2016 was [REDACTED]

The need after 2013 is significantly less than the need in the first compliance period. It was therefore quite possible that by contracting to fill the need through 2013, SDG&E would eliminate the need for the next three years. SDG&E viewed this as undesirable, because its market view was at that renewables prices would continue to drop. SDG&E did not want entirely to miss its opportunity to contract at those lower prices, and therefore it sought to fulfill its near-term need through 2013 with shorter-term contracts, by penalizing long-term contracts that had large delivery volumes after 2013.

SDG&E defined a Near-Term Long-Term (NTLT) adder, which would only be added to the bid ranking prices of contracts delivering in CP1, by first determining what the cost of the "marginal" offer would be if it sought to meet the 2016 need without any CP1 contracts. That cost was called the Mid-Term Price Benchmark (MTPB). For a given offer, the adder

### 3. SDG&E's methodology for bid evaluation and selection

computed the total contract cost over and above the MTPB, minus an "avoided renewables cost" of \$50/MWh (the TREC cost cap) representing the renewability value of CP1 deliveries, and apportioned it over all the energy expected to be supplied:

$$\text{NLT adder} = [(AMC - MTPB) * (\text{Post-2013 deliveries}) - 50 * (\text{CP1 deliveries})] / \text{Total deliveries}$$

Effectively the adder scales with contract cost – the higher the cost the higher the adder – but is less for contracts that have a greater fraction of their deliveries in CP1. The goal of the adder was to skew the evaluation in favor of contracts with fewer post-2013 deliveries, but it is dominated by the contract cost effect (and hence did not have a great effect on the ranking of the shortlist).

This adder was the cause of considerable discussion in SDG&E's PRG. We believe that part of that discussion was just due to the confusing name of the adder, which is why we prefer to call it a *Near Term Long Term* adder. To determine whether it is reasonable to include such an adder, and whether the computation is reasonable, the following questions must be addressed:

- Is it reasonable for SDG&E to place a priority on CP1 need?
- Could the priority placed on meeting CP1 need create additional future ratepayer costs?
- Does the adder appropriately recognize those costs?

#### a. PRIORITY ON CP1 NEED

In constructing its shortlist, SDG&E first selected enough bids to cover its projected renewables need in 2011-13. Only then would SDG&E consider bids from projects with later online dates. This means that renewables need in the first compliance period was given an absolute priority over need in later periods: SDG&E would shortlist enough resources to meet CP1 need regardless of the cost, and regardless of whether significantly cheaper resources were available with later online dates. The alternative would have been to identify a target amount of renewable capacity or energy to procure, regardless of online date.

This is a reasonable approach. SDG&E faces separate SBX1-2 RPS requirements for each of three compliance periods (2011-2013, 2014-2016 and 2017-2020). Renewable deliveries in one period cannot substitute for deliveries in an earlier period. This was a particular concern to SDG&E because it interpreted SBX1-2 as having eliminated the "earmarking" regime under which 2014 deliveries could meet 2012 or 2013 need, and SDG&E already had several contracts with 2014 online dates.

#### b. OUT-YEAR IMPACTS OF FILLING CP1 NEED

SDG&E believes that renewable energy prices from plants with online dates of 2014 and later will be less than the prices offered by plants with earlier online dates. This may be true; certainly the bids seen in the 2011 RPS RFO bear that out, if developers are able to deliver at their bid prices. The assumption may be incorrect but it still behooves SDG&E to allow for the possibility that prices associated with later online dates will be lower.

On the other hand, SDG&E faces a significant need in 2012 and 2013. If SDG&E were to fill that needs by contracting only with new plants, which come online in the next two years, it would continue to receive deliveries well beyond the compliance regime defined in SBX1-2.

### 3. SDG&E's methodology for bid evaluation and selection

Given the contracts already signed, SDG&E may not have had to contract further with plants coming online after 2013, and would lose the opportunity to capture those lower prices.

Therefore it makes sense for SDG&E to try to fill its immediate need with shorter-term obligations, in particular with RECs and contracts with existing plants, and to try to reserve some of its later need for contracts with later online dates.<sup>16</sup> The NTLT adder represented an attempt to impact the sequencing of CP1 bids, in the construction of the shortlist, so as to favor bids that would account for less of the compliance period 2 need.

#### c. STRUCTURE OF THE NTLT ADDER

The NTLT adder was intended to compute the cost increase after 2013 due to choosing projects with online dates in 2012 and 2013 rather than those with later online dates. The computation began by determining the "opportunity value" of CP2 need. That opportunity value is the levelized contract cost of the most expensive bid that would have been chosen to meet CP2 need, if there were no deliveries from shortlisted contracts with earlier online dates. SDG&E called that opportunity cost the "Mid-Term Price Benchmark" (MTPB).

The opportunity cost of any contract with earlier delivery is then its own AMC, minus the MTPB. For example, if MTPB=\$90 that would mean that CP2 need could be met by contracts with online dates after 2013, at an above-market cost of \$30/MWh. If instead SDG&E were to sign a contract with a plant coming online in 2012 whose AMC is \$45/MWh, then for every megawatt-hour delivered after 2013 SDG&E is "paying too much" and the amount by which it is overpaying is \$45/MWh - \$30/MWh = \$15/MWh. The total excess cost is obtained by multiplying that value by the CP1 contract's expected post-2013 deliveries. This is an appropriate representation of the extra post-2013 cost attributable to this contract.

On the other hand, contracts delivering in CP1 do have value insofar as they meet CP1 need. The penalty cost for failing to meet RPS targets is \$50/MWh; although it is paid by shareholders and not ratepayers it is still a good indication of the value of meeting RPS targets. Therefore, SDG&E subtracted from each contract's NTLT adder a "CP1 Renewability Value" of \$50/MWh times the expected CP1 deliveries.

Members of the PRG objected to the use of this renewability value. The immediate cause of the objection was the observation that short-term TRECs, and any other contracts terminating before 2014, would have a negative adder (-\$50/MWh). SDG&E therefore agreed to assign a zero adder to bids with no deliveries after CP1.

Upon further reflection we believe that the attribution of the CP1 Renewability Value was inappropriate for all contracts. That value was already implicitly recognized by priority given to CP1 need. PA recomputed the adders, removing the CP1 Renewability Value, and regenerated the shortlist. We determined that there was no change, that is, SDG&E would have arrived at the same shortlist. The only bids whose relative rankings changed were bids that were eliminated for qualitative reasons anyway.

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<sup>16</sup> [REDACTED]

### 3. SDG&E's methodology for bid evaluation and selection

#### 3.2.6 Changes from the 2009 LCBF model

##### a. MPR AS A MEASURE OF VALUE

In previous RFOs, SDG&E's bid evaluation method did not directly compare costs and benefits of individual contracts. Instead, SDG&E created an "adjusted price" metric for each contract, and compares contracts based on that metric rather than on a measure of net benefits or net costs. The adjusted price was computed by dividing the payment in each subperiod by the TOD factor that subperiod, and then dividing the total adjusted payment by the total projected deliveries. Note that if a bidder specified that it was to be paid a "TOD-adjusted" price, its payments would be based on the product of the bid price and the TOD factor; the subsequent division by TOD factor merely restored the bid price.

The "adjusted price" method is an example of a practice that PA would not have employed, but which is a reasonable approximation. Using the adjusted price meant that SDG&E did not have to compute or justify a 30-year projection of "avoided costs" or "market prices" by hour or subperiod to be compared with contract costs. It simplified the bid evaluation process but led to occasionally counterintuitive reporting: the difference between the nominal bid price and the adjusted price was reported as a "TOD adjustment adder", which, was zero for TOD-adjusted pricing (as noted above, the division by the TOD factor restored the nominal contract price in each period) and nonzero for uniform pricing (even of baseload energy).

In the 2011 RFO, SDG&E used an intermediate method: instead of forecasting avoided costs, SDG&E used the levelized MPR prices (actually the prices that would be produced by the MPR calculator with updated assumptions) as proxy avoided costs. PA and SDG&E discussed the use of this methodology when SDG&E put together its 2010 RPS plan, and PA supported the change. PA participated in a workshop and explained its belief that the changed method would be superior as it would eliminate the previous confusion and provide an identifiable standard of energy value.

##### b. ABANDONMENT OF DURATION EQUALIZATION METHOD

Contracts often have not a single price but a series of prices due to internal escalation factor; even a constant price should be interpreted as a series due to discounting. Quantitative evaluation methods have to reduce the series to a single value and there is no single accepted method for doing so.

It is often difficult to compare contract alternatives with different durations or starting dates. If two contracts have equal duration, but one starts (say) a year later than the other, then the later contract ought to have higher prices. Alternatively there is no obvious way to compare a 15-year contract and a 20-year contract on price alone, as the 5 years of benefits foregone by the shorter contract must be accounted for.

In past Renewables RFOs, SDG&E used a "duration equalization" approach to handle start and end effects. All contracts were put on an equal term basis by using an early start date (in principle, the earliest start date over all bids) and a late end date (in principle, the latest end date over all bids). The "pricing" for each contract prior to its start date and after its end date was based on a proxy. In earlier years the proxy was a value computed using the CPUC's MPR methodology applied to contemporary cost assumptions. For the 2009 RFO, SDG&E's evaluation model was constructed to use the average bid price of bids shortlisted in 2008 as a proxy instead of the MPR; all other aspects of the design were the same as before.

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In the 2011 RFO SDG&E eliminated the duration equalization computation. This is not a totally satisfactory result. Because the value being levelized is only the above-MPR cost, eliminating duration equalization essentially implies that renewable power will not cost significantly more than non-renewable power. Many people do believe that the cost of renewable power will come down in the next decade but we consider it unlikely that it will match the cost of conventional power absent a carbon tax. On the other hand it is also unlikely that the value of renewability would be \$50/MWh (the RPS penalty cost), and zero is probably a more reasonable value.

#### c. COMPUTATION OF DELIVERABILITY ADDER

In past RPS RFOs, deliverability or RA adders (or credits) were computed based on estimates of the value of local and system RA, and assumptions about the amount of Net Qualifying Capacity (NQC) that the California ISO would compute for different technologies. There was always a considerable amount of uncertainty in these assumptions – for example, there was very little history of ISO determinations of NQC for solar plants. The approach used in 2011, which is based on delivery profiles, CPUC-approved TOD factors, and MPR proxies, is much more defensible.

### 3.3 STRENGTHS AND WEAKNESSES OF SDG&E'S LCBF METHODOLOGY

*Template language: "Using the principles identified in section III.A, evaluate the strengths and weaknesses of IOU's methodology in this solicitation:*

*"1. Market valuation. Were both price and value taken into consideration when projects were shortlisted? Did the IOU adequately take into consideration all financial benefits and costs of a project when determining the value of projects that were shortlisted? Did the IOU include the cost of transmission upgrades in the value calculation of projects that were shortlisted? In your opinion, were any costs or benefits that should have been included in the IOU's LCBF calculation not included?*

*"2. Evaluation of portfolio fit. This should include evaluating how a project meets the IOU's RPS generation need for each compliance period under SB 2. Did the IOU reasonably calculate its net short compliance period? Did the IOU adequately take into account a project's portfolio fit against the IOU's net shortposition in each compliance period? Does the shortlist conform to the needs of the IOU's portfolio?*

*"3. Evaluation of bids with varying sizes, in-service dates, and contract lengths. Did the IOU choose projects for the shortlist that provide the best overall value while meeting the needs of the IOU's three compliance periods? Could the IOU have incorporated a decision-making process that provided for a different portfolio of projects that provide better overall ratepayer value while meeting the IOU's RPS compliance needs?*

*"4. Evaluation of bids' transmission costs. Did the IOU rely more on TRCR studies than Phase I or Phase II studies to ascertain transmission costs? Did the IOU weigh the total cost of transmission upgrades for a project against the relative value in resource adequacy that the transmission upgrade will provide for each project? Did the IOU perform any data conformance checks related to transmission study results and cost information for projects before they were included on the shortlist?*



### 3. SDG&E's methodology for bid evaluation and selection

*"5. Evaluation of bids' project viability. Did the IOU (or IE or developer) reasonably measure the viability of each project in the bid evaluation process? Did the IOU perform conformance checks related to the accuracy of the projects' viability scores before the projects were included on the shortlist?"*

*"6. Other."*

Overall, PA believes that the SDG&E methodology is reasonable. This judgment is within the context of the principles set forth in 3.1. The LCBF model was computed directly from bidder response forms and took no notice of potential affiliation. It bears a rational, consistent relationship to cost and value, and was set out prior to any bids having been seen by SDG&E or PA. The 2011 LCBF model is superior to the models SDG&E used in previous RFOs, incorporating lessons learned. The model itself was not biased for or against any technologies ( [REDACTED] )

We will address the points above in turn.

#### 3.3.1 Market valuation

The LCBF model accounted for both price and value of projects. Both energy and deliverability value were taken into account, by first subtracting energy and capacity value from the bid price, and then adding back some or all of the capacity value for projects that would not fully deliverable against SDG&E's capacity requirements (including local needs). The model did not account for some other costs SDG&E has in the past sought to include, such as debt equivalence or integration.

The MPR model produces proxy costs that depend on the year in which a project comes online, so that a project with a Dec. 31, 2013 online date sees an avoided cost that is significantly lower in every year than the avoided cost seen by a project with a Jan. 1, 2014 online date. PA suggests that SDG&E convert the MPR costs into a stream of subperiod price proxies that do not depend on commercial online dates.

SDG&E's method is based on the assumption that the developer has correctly estimated all its costs, including permitting. It would be useful, and would produce more viable bids, if the company were able to evaluate the reasonableness of developer cost estimates. In order to do so, though, SDG&E would need to request significantly more information from developers. The number of bids received in 2011, and the short timeframe for evaluation, would have made that impossible as part of the LCBF evaluation. Such an analysis would have to be limited to already-shortlisted bids in a brief period after shortlisting (but the shortlist would have to be to allow for dropping bids after this analysis).

#### 3.3.2 Evaluation of portfolio fit

It is clear from the explanation in the template that by "portfolio fit" the CPUC does not mean the temporal profile of deliveries within the year or the risk profile of the entire contract portfolio (mix of contract durations) but specifically the three targets set by SBX1-2. We reviewed SDG&E's probabilistic determination of its need by compliance period and we consider it to be reasonable. SDG&E estimated success probabilities by contract, and appears to have been conservative in doing so.

### 3. SDG&E's methodology for bid evaluation and selection

SDG&E determined that it had much greater need in the first compliance period than in subsequent periods, based both on contracts already signed and the short time available in which to satisfy that CP1 need. The need analysis rests on SDG&E's assumption that because SBX1-2 removes the *requirement* that the CPUC allow something like earmarking, the Commission will no longer allow it. [REDACTED]

Because of that need judgment, SDG&E sought to fill its CP1 need before considering other compliance periods. Doing so would also fill its CP2 need. SDG&E sought to reserve some CP2 need for cheaper contracts using its NTLT adder. [REDACTED]

[REDACTED] All these actions are reasonable.

#### 3.3.3 Evaluation of bids with various sizes, in-service dates and contract lengths

Once the bids had been ranked by the LCBF model, SDG&E chose bids for its shortlist. [REDACTED]

[REDACTED], SDG&E reports that it was told that the CPUC can generally only approve one of its contracts at each meeting. This limits the number of contracts SDG&E should pursue. SDG&E's rule of thumb is a reasonable response.

The duration equivalence scheme was abandoned for good reason, but it would still be useful to have a better way to compare projects that deliver in different sets of years. Levelized costs over the 2016-2035 period are not really comparable to levelized costs over 2013-2027. SDG&E should continue to investigate better ways to deal with diversity of start dates and contract duration.

#### 3.3.4 Evaluation of bids' transmission costs

The transmission upgrade cost estimation was based on stale Transmission Ranking Cost Report estimates (over 18 months old), and the reports themselves are not really fit for their purpose (estimating upgrade costs of bids) because they do not cover all sites or CREZs and do not clearly explain how to determine the cluster appropriate to a given bid. On the other hand, ISO interconnection studies were unavailable for most bids and recent ISO cost estimates have been extremely high. At this point we have no suggestion for improvement.

#### 3.3.5 Evaluation of bids' project viability

[REDACTED] n. This is consistent with the behavior that PA has observed in the past: [REDACTED]

3. SDG&E's methodology for bid evaluation and selection



[REDACTED] In this case, SDG&E eliminated several sets of bids from consideration:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

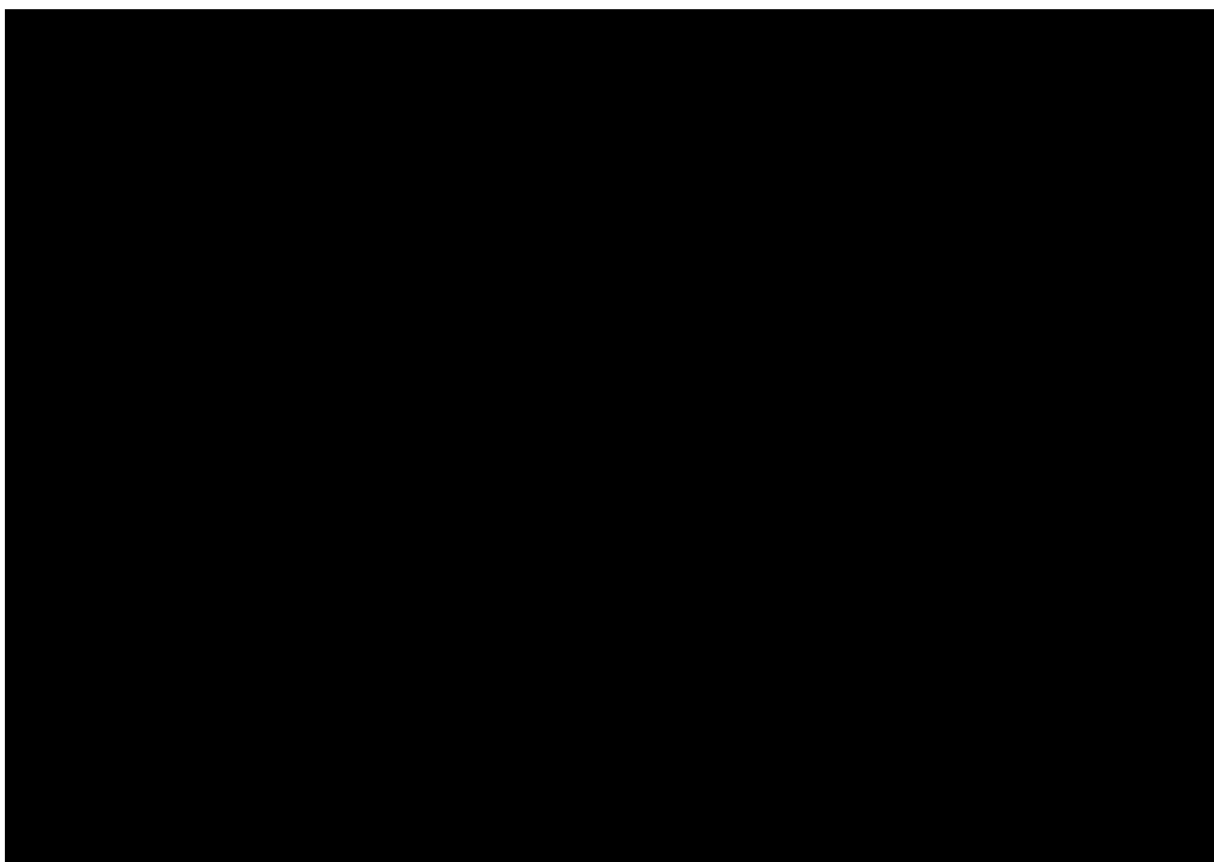
All these cases were reported to the PRG.

The Project Viability Calculators were self-scored by developers. SDG&E did not attempt to verify these scores. PA rescored the Project Viability Calculators for the top 30 CP1 bids. [REDACTED] PA also rescored the Project Viability Calculators for the top 20 CP2 bids. [REDACTED]

Figure 1 shows the bidders' submitted scores as well as PA's recomputed scores for those 35 bids. Points below the dashed line indicate cases where the bidder's submitted PVC score was above the score PA computed. [REDACTED]

[REDACTED] There are a few cases where bidders were more conservative in their scoring than PA. [REDACTED]

[REDACTED]

3. 

### 3.4 FUTURE IMPROVEMENTS

*Template language: "What future LCBF improvements would you recommend?"*

PA has noted several potential improvements to the LCBF evaluation.

1. The use of the CPUC's MPR model to provide estimates of energy and capacity value is an improvement over past LCBF evaluations. It is not necessary to do a full market price forecast, but PA does recommend some "smoothing" of the MPR model outputs. The MPR model produces proxy costs that depend on the year in which a project comes online, so that a project with a Dec. 31, 2013 online date sees an avoided cost that is significantly lower in every year than the avoided cost seen by a project with a Jan. 1, 2014 online date. PA suggests that SDG&E convert the MPR costs into a stream of subperiod price proxies that do not depend on commercial online dates.
2. The model PPA for the 2011 was changed from previous years by explicitly including "Economic Dispatch Down" rights for SDG&E. SDG&E makes the seller whole for such curtailment, which means that SDG&E incurs a cost. The cost may depend on bid characteristics (delivery profile or location) so SDG&E should seek to represent it in the LCBR model.

### 3. SDG&E's methodology for bid evaluation and selection

3. The LCBF model is dependent on information provided by developers. It would be useful, and would produce more viable bids, if SDG&E were to evaluate the reasonableness of developer cost estimates. This "due diligence" would probably occur outside (and after) the LCBF process but after a couple of years' experience could be used to modify the model itself.
4. The duration equivalence scheme was abandoned for good reason, but it would still be useful to have a better way to compare projects that deliver in different sets of years.

#### 3.5 ADDITIONAL COMMENT ON THE METHODOLOGY

*Template language: "Any additional information or observations regarding the IOU's evaluation methodology (e.g. capacity valuation, congestion cost adder, etc.)"*

PA has nothing else to add to this chapter.

#### **4. PROCEDURAL FAIRNESS OF THE BID EVALUATION**

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*Template language: "Was the LCBF bid evaluation process fairly administered?"*

This chapter addresses the application or administration of the methodology described in chapter 3.

##### **4.1 PRINCIPLES USED TO DETERMINE FAIRNESS OF PROCES S**

*"Template language: "Identify guidelines used to determine fairness of evaluation process. Example guidelines (each IE should identify the specific guidelines he/she used in his/her evaluation)"*

*"1. Were all bids treated the same regardless of the identity of the bidder?"*

*"2. Were bidder questions answered fairly and consistently and the answers made available to all bidders?"*

*"3. Did the utility ask for "clarifications" that provided one bidder an advantage over others?"*

*"4. Was the economic evaluation of the bids fair and consistent?"*

*"5. Was there a reasonable justification for any fixed parameters that were a part of the IOU's LCBF methodology (e.g., RMR values; debt equivalence parameters)?"*

*"6. What qualitative and quantitative factors were used to evaluate bids?"*

As in the previous section, PA used principles originally codified by PA in its report on SDG&E's 2006 RPS RFO:<sup>17</sup>

- Were affiliate bids treated the same as non-affiliate?
- Were bidder questions answered fairly and consistently and the answers made available to all?
- Did the utility ask for "clarifications" that provided the bidder an advantage over others?
- Were bids given equal credibility in the economic evaluation?
- Was the procurement target chosen so that SDG&E would have a reasonable chance of meeting its target (taking into account contract failures)?
- Was there a reasonable justification for any fixed parameters that enter into the methodology (e.g., RMR values; debt equivalence parameters)?
- Were qualitative factors used only to distinguish among substantially equal bids?

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<sup>17</sup> Jacobs, op. cit., p. 3-1.

**4.2 ADMINISTRATION AND BID PROCESSING**

Template language: "Utilizing the guidelines in Section IV.A, describe the IE methodology used to evaluate administration of the IOU LCBF process."

A complete description of PA's activities is in section 1.3. Based on PA's review of the solicitation and evaluation process:

- Affiliate and non-affiliate bids were treated identically. [REDACTED]
- Bidder questions were answered fairly and consistently.
- SDG&E did not ask for clarifications in such a way as to advantage any bidder.
- All bids were given equal credibility in the quantitative (LCBF) evaluation with the exception of those bids that were eliminated as described in 3.3.5.
- The "contingent need" target for CP1 would definitely give SDG&E a reasonable chance of meeting its RPS target. After discussion with PA, SDG&E did shortlist enough capacity to meet that target [REDACTED]
- PA reviewed with SDG&E the justification for any parameters that entered the computations. Most of them have been approved by the CPUC (e.g., the TOD factors) or are market indexes (e.g., the gas prices used in computing the proxy MPR cost).
- [REDACTED]

**4.3 CONFORMANCE CHECK**

Template language: "Did the utility identify, for each bid, the terms that deviate from the utility RFO? Did the IOU identify nonconforming bids fairly – fair both to the nonconforming bidders and to conforming bidders?"

[REDACTED]

[REDACTED]

SDG&E's treatment of non-conforming bids was fair and reasonable.

#### 4.4 PARAMETERS AND INPUTS FOR SDG&E'S ANALYSIS

*Template language: "If the IOU conducted any part of the bid evaluation, were the parameters and inputs determined reasonably and fairly? What controls were in place to ensure that the parameters and inputs were reasonable and fair?"*

The quantitative bid analysis was conducted by SDG&E and PA separately. In general PA used inputs taken directly from bid forms. Certain key parameters were supplied by SDG&E independent of any bids, including the TOD multipliers. Parameters and inputs for the congestion analysis were determined by SDG&E's transmission function independent of the procurement group.

#### 4.5 PARAMETERS AND INPUTS FOR OUTSOURCED ANALYSIS

*Template language: "If the IE or a third party conducted any part of the bid evaluation, what information/data did the utility communicate to that party and what controls did the utility exercise over the quality or specifics of the out-sourced analysis?"*

PA conducted the quantitative LCBF analysis using its own spreadsheet model, developed based on SDG&E's methodology and parameters supplied by SDG&E. SDG&E and PA were in communication throughout the analysis, generally in order to compare results and verify that any interpretations of the data or model were consistent with the philosophy and approach that had been stated prior to receiving bids. SDG&E did not exercise control over the quality or specifics of the analysis.

Congestion impacts from the proposed point of delivery to SDG&E's load aggregation point were determined by a study conducted by SDG&E's transmission function. PA and SDG&E's procurement group discussed the locations and delivery profiles to be communicated to the transmission function for this analysis.

#### 4.6 TRANSMISSION ANALYSIS

*Template language: "Were transmission cost adders and integration costs properly assessed and applied to bids?"*

For offers for new projects or projects proposing to increase the size of existing facilities, the model calculated costs for transmission network upgrades or additions, using the information provided through the TRCRs. PA identified clusters for projects whose bids did not contain that information. Projects outside of the California ISO were expected to have internalized the cost of transmission to the ISO, as well as the cost of required transmission upgrades outside the ISO, into their bid price; they could still be assigned additional upgrade costs within California based on the TRCRs. The transmission analysis is described in 3.2.2 and 3.3.4 above.

#### 4.7 ADDITIONAL MEASURES

*Template language: "Describe any additional measures the utility exercised in evaluating affiliate, buyout, and turnkey bids."*

SDG&E did not use any special measures in evaluating affiliate, buyout and turnkey bids.



[REDACTED] . SDG&E did not accept buyout or turnkey bids in this RFO.

#### 4.8 ADDITIONAL CRITERIA OR ANALYSIS

*Template language: "Describe any additional criteria or analysis used in creating its short list (e.g. seller concentration, online date, transmission availability, etc.). Were the additional criteria included in the solicitation materials?"*

##### 4.8.1 Short-term bid evaluation method

The RFO document included a special method for evaluating bids whose term was 4 years or less. It is basically equivalent to a method specified in the 2009 RFO for evaluating bids whose terms were 9 years or less. The method was not very precisely stated. First SDG&E would "assess price reasonableness" by comparing bids to a publicly available index plus, if necessary, a valuation of other attributes. Bids would be sorted from "most reasonably priced" to "least reasonably priced". SDG&E would then "short list the most reasonably priced offers that are most viable and reliable." PA had raised some concerns about this method when SDG&E was constructing the RFO, based on the fact that (a) a market index would be too low to be a reasonable standard for renewable offers and (b) there was no clear "need" criterion for the offer volume to accept.

Prior to the receipt of bids, PA asked SDG&E for the index it intended to use in evaluating short-term bids. SDG&E said it would use a five-day average of ICE forward prices and produced a strip of monthly prices, the greatest of which [REDACTED]

[REDACTED] Instead of the imprecisely defined short-term algorithm, SDG&E considered all bids using the LCBF algorithm. PA did not object.

##### 4.8.2 Concentration risk

[REDACTED]

[REDACTED]

Consideration of concentration risk was not explicitly mentioned in the solicitation materials. The RFO lists six examples of qualitative criteria SDG&E could use, and the closest to concentration risk is "resource diversity"; however, the list is not presented as exhaustive. [REDACTED] was reasonable and fair.

#### 4. Procedural fairness of the bid evaluation

##### 4.9 RESULTS ANALYSIS

*Template language:*” 1. Please identify instances where the IE and the IOU disagreed in the LCBF evaluation process.

“a. Discuss any problems and solutions

“b. Identify specific bids if appropriate

“c. Does the IE agree that the IOU made reasonable and justifiable decisions to exclude, shortlist and or/ execute contracts with projects? If the IE did its own separate bid ranking and selection process and it differed from the IOU’s results, then identify and describe differences.

“d. What actions were taken by the IOU to rectify any deficiencies associated with rejected bids?

“e. Other

“2. Overall, was the overall bid evaluation fairly administered?”

PA and SDG&E were in close and regular communication throughout the RFO process. In many cases when a ruling or judgment had to be made SDGE would first solicit PA’s opinion, or would ask PA to make the judgment. In this section we describe several examples where SDG&E solicited PA’s input, asked PA for a decision, or modified its conduct of the evaluation. Of these, the most important are the first one and the two in section 4.9.2.

##### 4.9.1 Interactions between PA and SDG&E during bid evaluation

###### a. EMPHASIS ON THE NEAR TERM

We believe that one of the reasons SDG&E was willing generally to accept PA’s judgments was that SDG&E’s main goal, which was to acquire renewable energy in 2012-2013 without jeopardizing its ability to sign cheaper contracts for later delivery, was not threatened. SDG&E discussed its concerns with PA several times in the May-July timeframe.

PA did not feel competent to judge whether something like “earmarking” would be continued and was willing to accept SDG&E’s opinion for the purpose of this solicitation. As we have noted before, the utilities are at risk of financial penalties if they fail to achieve their RPS targets. On the one hand this means that the utility should be able to follow a strategy which PA – but not the utility – thinks enhances the danger of missing its RPS target, since the utility is at risk. On the other hand, though, if a utility outlines a strategy that is motivated by a desire to avoid penalties – in other words when it follows the exact incentives the RPS program seeks to create – it should be able to adopt that strategy so long as it is implemented fairly and without creating extra benefits for the utility or its affiliates at the expense of ratepayers.

SDG&E explained to PA its main goal, noted above. SDG&E told PA that it intended to state at the bidder conferences its preferences for renewable power delivered in the near term. PA was initially unresponsive of adding objectives to the procurement that were not detailed in the RFO. PA came to agree with SDG&E’s plan, because this strategy and objectives would be clearly explained to bidders at the bidder conferences, which occurred more than a month

4. Procedural fairness of the bid evaluation

before bids were due. As we noted earlier, these verbal presentations were accompanied by some statements in the media, but not by an RFO addendum or other written communication to all bidders.

Later, but prior to the bid evaluation, SDG&E described to PA its proposed Short Term Long Term (STLT – NTLT in PA’s nomenclature) adder. PA questioned SDG&E closely on the reasoning behind the adder and its computation. PA was convinced that the adder provided reasonable guidance to the “lost opportunity” cost and accepted its use.

b. ACCEPTANCE OF LATE BIDS

In section 4.3 we describe the late submissions. SDG&E asked PA to make the decision as to whether to accept late bids, or where to set the cutoff.

c. TECHNICAL POINTS OF BID EVALUATION

PA and SDG&E evaluated the bids separately. We conferred regularly to compare notes on intermediate results, and judgments that had been made in implementing the LCBF methodology. There were a number of disagreements on specific aspects of the calculation. In almost all these cases we were able to convince SDG&E that we were correct, or more consistent with the philosophy of the RFO. In some cases, PA yielded to SDG&E, generally when SDG&E was able to demonstrate that PA was factually incorrect. [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

d. BID ELIMINATION

Section 3.3.5 lists several bids that were eliminated. [REDACTED] SDG&E

4. Procedural fairness of the bid evaluation



eventually backed away from that reasoning, but then presented an alternative rationale which PA accepted.

**4.9.2 PRG issues**

a. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1. [REDACTED]

[REDACTED]

We believe that SDG&E's consideration of the short-term bilateral contracts was reasonable.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**4.9.3 Overall judgment**

PA's judgment is that solicitation was fairly administered.

**4.10 OTHER RELEVANT INFORMATION**

*Template language: "Any other relevant information or observations."*

Please see section 2.5 for a discussion of SDG&E's emphasis on projects that could deliver significant amounts of renewable energy by 2013, how it communicated that emphasis to bidders, and the degree to which SDG&E succeeded in eliciting bids with early delivery. PA recommends that in the future any supplemental information expressing SDG&E's product preferences be issued as a formal addendum to the RFO; that it be emailed (if possible) to all parties that had already downloaded the RFO; and that all respondents be required to acknowledge receipt of any amendments to the RFO.

[REDACTED]

**5. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS**

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[REDACTED]

PA participated in one call with AES and 8ME, but has generally followed the negotiations through review of contracts. PA had determined that since there was no affiliate relationship it would be sufficient for PA to regularly discuss the progress of negotiations with SDG&E, and to review any negotiation products.

**5.1 PRINCIPLES OF EVALUATION**

*Template language: "A. Identify principles used to evaluate the fairness of the negotiations."*

The key questions are whether SDG&E showed favoritism to this or any other bidder, and whether SDG&E negotiated harder or less hard with them than with any other bidder. Note that in the context of negotiations, favoritism toward a bidder is not the same as favoritism toward a technology.

**5.2 PROJECT-SPECIFIC NEGOTIATIONS**

*Template language: "Using the above principles (section V.A), please evaluate fairness of project-specific negotiations."*

In general PA does not directly observe most contract negotiations, except for those with affiliates. PA follows negotiations through discussions with SDG&E, summaries of current proposals, and SDG&E's reports to its Procurement Review Group. This is consistent with the original understanding of PA's role as IE, which was developed when PA and SDG&E negotiated their initial contract (with the participation of the PRG).

[REDACTED]

[REDACTED]

5. Fairness of project-specific negotiations



The goals in items 2-4 were each met to both parties' satisfaction in the executed contract. SDG&E has reported that the AES/8ME team was a good counterparty to negotiate with, as they were motivated to get a deal done quickly and fairly.

[REDACTED]

A final PPA was executed on February 10, 2012.

[REDACTED]

It is PA's opinion that the Mt Signal I contract reflects fair negotiations.

**5.3 TERMS AND CONDITIONS**

*Template language: "Identify the terms and conditions that underwent significant changes during the course of negotiations."*

PA has reviewed several contract drafts exchanged between AES/8ME and SDG&E,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

We note the following significant changes and additions made through negotiation:

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

[REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]

- [REDACTED]



- [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]
- [REDACTED]
- [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
- [REDACTED]

## 5. Fairness of project-specific negotiations

PA

- 

The contract contains a number of other changes, clarifications and details. It is PA's opinion that the items listed above are the most important to the economic evaluation of the contract, and that collectively they represent a fair attempt to maintain the balance of risks and costs from the model PPA and original offer.

### 5.4 RELATION TO OTHER NEGOTIATIONS

*Template language: "Was similar information/options made available to other bidders, e.g. if a bidder was told to reduce its price down to \$X, was the same information made available to others?"*

PA does not believe that SDG&E provided AES or 8ME with information of the type addressed here.

### 5.5 ADDITIONAL ISSUES

*Template language: "Any other relevant information or observations."*

PA has nothing further to add to this chapter.

**6. PROJECT-SPECIFIC RECOMMENDATION**

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PA agrees with SDG&E that the Mount Signal I solar contract merits CPUC approval.

**6.1 EVALUATION**

*Template language: "A. Provide narrative for each category and describe the project's ranking relative to: 1) other bids from the solicitation; 2) other procurement opportunities (e.g. distributed generation programs); and 3) from an overall market perspective:*

*1. Contract Price, including transmission cost adders*

*2. Portfolio Fit*

*3. Project Viability*

*a. Project Viability Calculator score*

*b. IOU-specific project viability measures*

*c. Other (credit and collateral, developer's project development portfolio, other site-related matters, etc.)*

*4. Any other relevant factors."*

[REDACTED]

[REDACTED]

[REDACTED]

**6.1.1 Relative Pricing**

PA re-evaluated the Mount Signal I contract using the same evaluation model that had been used for the 2011 Renewables RFO.

PA used the following assumptions and parameters:

[REDACTED]

6. Project-specific recommendation

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

6.1.2 Project Viability Calculator

[REDACTED]

- [REDACTED]

6. *Project-specific recommendation*

PA

[REDACTED]



6. *Project-specific recommendation*

**6.3 ADDITIONAL ISSUES**

*Template language: "Any other relevant information or observations."*

PA has nothing else to add to this chapter.