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ADVICE LETTER 2276-E (U 902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: REQUEST FOR APPROVAL OF A RENEWABLE POWER PURCHASE AGREEMENT WITH CATALINA SOLAR, LLC

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 Catalina Solar, LLC ("Catalina"). This proposed PPA between SDG&E and Catalina (the "Proposed Agreement") is for a 25-year term and involves delivery of 110 MW of solar energy from a photovoltaic plant to be constructed in the Mojave Desert located in Kern County, California. The Proposed Agreement establishes a formal commercial online date of June 30, 2013 with 50 MW of deliveries to begin by December 31, 2012. This project will advance SDG&E's RPS procurement goals.

B. SUBJECT OF THE ADVICE LETTER

- 1. PROJECT NAME: Catalina 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 in an unincorporated area of Kern County near the community of Willow Springs about 24 miles west of Edwards Air Force Base. The project will interconnect to the CAISO grid at the new Whirlwind Substation which is part of Southern California Edison's Tehachapi Renewable Transmission Project ("TRTP"). This general area is rich with existing and proposed renewable energy projects.

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

- a. <u>NAME(s):</u> Catalina Solar, LLC is the owner of the Project, and enXco Development Corporation ("enXco") is the developer of the project with financial backing from its parent company, EDF Energies Nouvelles Company ("EDF EN").¹
- b. <u>TYPE OF ENTITY(IES) (E.G. LLC, PARTNERSHIP):</u> The counterparty (owner) to the Proposed Agreement is a limited liability company.
- c. <u>BUSINESS RELATIONSHIPS BETWEEN SELLER/OWNER/DEVELOPER:</u> Catalina, the owner/Seller, is a wholly owned subsidiary of enXco, the developer.

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

The proposed project was presented to SDG&E on March 8, 2011 while SDG&E was seeking transactions that could begin delivering Renewable Energy Credits ("RECs") during the early years of 2011-2013, which may have been difficult to achieve through the next RFO solicitation.²

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

The proposed project was bilaterally presented to SDG&E on March 8, 2011 and culminated in an executed PPA on June 3, 2011.

C. GENERAL PROJECT(S) DESCRIPTION

| PROJECT NAME | Catalina Solar |
|---|--|
| TECHNOLOGY | Solar photovoltaic |
| CAPACITY (MW) | 106-110 MW |
| CAPACITY FACTOR | 23 to 25% first year |
| EXPECTED GENERATION (GWH/YEAR) | 224 GWh degrading at 0.75%/year |
| INITIAL COMMERCIAL OPERATION DATE | June 30, 2013 w/50 MW initial deliveries beginning December 31, 2012 |
| DATE CONTRACT DELIVERY TERM BEGINS | As of commercial operation |
| DELIVERY TERM (YEARS) | 25 years |
| VINTAGE (NEW/EXISTING/REPOWER) | New facility |
| LOCATION (CITY AND STATE) | Kern County, California (between Tehachapi & Lancaster, CA) |
| CONTROL AREA (E.G., CAISO, BPA) | CAISO |
| NEAREST COMPETITIVE RENEWABLE ENERGY ZONE (CREZ) ³ | Tehachapi |

EDF EN is owned by EDF Group, the French utility ("EDF"), one of the largest energy providers in the world

At the time the offer was presented, it was not known when the next RFO would be held. As discussed below, the Commission issued its decision conditionally approving SDG&E's 2011 RPS Plan on April 14, 2011; SDG&E's RPS RFO was issued on May 11, 2011.

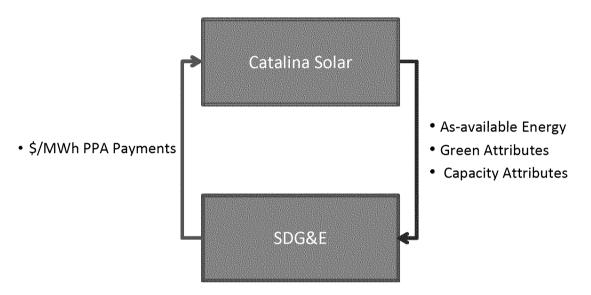
As identified by the Renewable Energy Transmission Initiative (RETI). Information about RETI is available at: http://www.energy.ca.gov/reti/

| TYPE OF COOLING, IF APPLICABLE | Not applicable | |
|---|----------------|--|
| PRICE4 RELATIVE TO MPR (I.E. ABOVE/BELOW) | Above | |

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 bundled energy, capacity attributes, and green attributes from the Catalina Solar facility for a 25-year term. The facility interconnects directly to the CAISO 230KV bus at the Whirlwind Substation.



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 states, in part that "increasing California's reliance on eligible renewable energy resources may promote stable electricity prices, protect public health, improve environmental quality, stimulate sustainable economic development, create new employment opportunities, and reduce reliance on imported fuels." 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.

⁴ Refers to the levelized price under the Proposed Agreement vs. the applicable levelized MPR

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

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.

| Type of Information | D.06-06-066 Confidential Matrix Category |
|---|--|
| 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"). 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.

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.

No such suspension was issued by the Energy Division; therefore, on May 11, 2011 SDG&E issued the 2011 RFO.

As discussed in more detail below, since final results from the 2011 RFO are not yet available, SDG&E demonstrates the reasonableness of the Proposed Agreement through comparison of the terms and conditions of the Proposed Agreements against the results of its 2009 RPS RFO. The CPUC conditionally approved SDG&E's 2009 RPS Plan in D.09-06-018. SDG&E issued its 2009 RFO on June 29, 2009.

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

The 2009 and 2011 RPS Plans express SDG&E's commitment to contract in excess of its mandated annual procurement targets in the near term and its goal of serving 33% of its retail sales with renewable resources by 2020. The plans further confirm SDG&E's commitment to providing 2,253 GWh per year of renewable energy on the Sunrise Powerlink ("SPL"), and consistent with the SPL decision, to treat Imperial Valley region resources separately from other RPS offers in order to achieve this goal. SDG&E's goal is to develop and maintain 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 an unsolicited 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).

The Proposed Agreement conforms to SDG&E's 2009 and 2011 Commission-approved RPS procurement plans by delivering bundled renewable energy and associated Green Attributes that fill a portion of SDG&E's RPS net short position.

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 (2009) were as follows:

- a. Deliveries must begin in 2010, 2011, 2012 or 2013.
- b. The project must be RPS-eligible.
- c. The Net Contract Capacity must be ≥ 1.5MW, net of all auxiliary and station parasitic loads; (if within SDG&E service area)
- d. The Net Contract Capacity must be ≥ 5MW, net of all auxiliary and station parasitic loads; (if outside of SDG&E service area)

The Proposed Agreement fulfills these requirements.

B. <u>BILATERAL CONTRACTING - IF APPLICABLE</u>

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

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 pricing that is "reasonable." On June 19, 2009, the Commission issued D.09-06-050 establishing price benchmarks and contract review processes for very short term (< 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 2009 RPS RFO. The same analysis was performed on this PPA and the results were compared to the RFO results. This analysis confirms that the Proposed Agreement conforms to the price benchmarking requirements of D.06-10-019 and D.09-06-050.

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

Competitive RFOs are not the only authorized means of procurement. SDG&E's ability to consider bilateral offers widens the scope of resources available to SDG&E. The Western Electricity Coordinating Council ("WECC") has a well-established, liquid bilateral market. SDG&E, for the benefit of its ratepayers, can make full use of this valuable source of renewable supply. Not only is the bilateral market an important tool for procurement, it is available year-round. RPS RFOs, by contrast, are an annual batch-processing of commercial arrangements. The Commission approved SDG&E's 2009 and 2011 RPS Plans, both of which allow for bilateral renewable contracts. The renewable energy opportunity resulting in the Proposed Agreement arose at a point when it was too late to submit the Project into the prior 2009 RPS RFO, and before the 2011 RPS RFO schedule had been adopted by the Commission. Waiting for the later RFO would have prevented the Project from achieving early test energy deliveries in 2012 and may have delayed the online date, which would not have been in the best interest of ratepayers or the State's RPS program.

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

enXco approached SDG&E with the proposed transaction in early March 2011. In order for the project to be eligible for the Cash Grant In Lieu of Investment Tax Credits ("Cash Grant") under Section 1603 of the American Recovery and Reinvestment Act ("ARRA") of 2009, the project would need to commence construction by the end of 2011 or spend at least 5% of the eligible project capital prior by this date - thus time us of the essence. With the uncertainty surrounding the to-be-determined RFO, it was decided to commence negotiations with enXco rather than risk a delayed outcome which could jeopardize early 2012 / 2013 deliveries. Thus, this PPA was negotiated bilaterally over a period of less than 90-days and was seen as a good opportunity to secure the expansion of SDG&E's RPS portfolio by

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⁶ D.06-10-019, *mimeo*, p. 31

110 MW. The comparison and evaluation of the Proposed Agreement's cost and value contained in Confidential Appendix D demonstrates that this Project provides benefits to ratepayers, including new renewable generation in an area targeted for such, an experienced and credible developer enhancing project viability, and early deliveries which aids in meeting RPS goals.

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

The following sections review SDG&E's 2009 RPS RFO process. The offers into the 2009 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 2009 RFO was issued on June 29, 2009. Responses for projects located in the Imperial Valley region were due September 8, 2009. All other responses were due August 25, 2009. 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 three types of projects:

- a) Power purchase agreements for short-term deliveries up to nine years and long-term deliveries for ten years or more;
- b) A power purchase agreement with an option price for SDG&E to acquire the facility along with all environmental attributes, land rights, permits and other licenses, thus enabling SDG&E to own and operate the facility at the end of the PPA term; and
- c) Turnkey projects to develop, permit, and construct new, RPS-eligible generating facilities to be acquired by SDG&E.

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) Internet upload capabilities were available to accept electronic offers;
- c) The Independent Evaluator participated in the selection process, including the direct evaluation of bids; and

d) SDG&E adhered to the following RFO schedule:

| <u>DATE</u> | EVENT |
|--------------------|--|
| June 29, 2009 | RFO Issued |
| August 5, 2009 | Pre-Bid Conference (in San Diego, California) |
| August 12, 2009 | Pre-Bid Conference (in El Centro, California) |
| August 25, 2009 | Offers Due (non-Imperial Valley projects) |
| September 8, 2009 | Offers Due (Imperial Valley projects) |
| September 25, 2009 | Briefed PRG on all offers received, preliminary LCBF ranking, preliminary list of highest ranked offers and preliminary shortlist. |
| October 23, 2009 | 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. |
| November 23, 2009 | Notified Energy Division of final shortlist. |
| December 4, 2009 | 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 bilateral offer from enXco, in accordance with the LCBF process outlined in D.03-06-071, D.04-07-029, and its approved RPS 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." 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 2009 RFO by sorting all projects by the All-In Bid Ranking Price, from lowest to highest. Those projects with the lowest All-In Bid

⁷ See D.06-05-039, *mimeo*, p. 42.

Ranking Price that passed through qualitative filters for location and viability were short listed. From a "best-fit" perspective for 2009, projects which fit SDG&E's portfolio needs best were in-state projects that would be served by the Sunrise Powerlink.

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 Catalina 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 Catalina's All-In Bid Ranking Price.

<u>Bundled Energy Prices</u>: The offered bundled energy prices form the basis of the LCBF ranking and are included in the All-In Price, as modified below.

Time of Delivery ("TOD") Adjustors: SDG&E accounts for differences in the value of various delivery profiles. To properly asses the value of the deliveries from an intermittent resource. SDG&E divided the proposed energy price by SDG&E's Time-of-Delivery factors for each MWH the project delivers during each delivery period over the term of the agreement. The total cost was summed and divided by energy delivered. A present value figure was calculated for the payment and energy streams and an overall levelized TOD Adjusted Bid Price on a \$/MWH was calculated. The difference between the levelized TOD Adjusted Bid Price and an unadjusted levelized bid price represented the TOD Adjustment Projects that provided a greater proportion of their annual deliveries in summer on-peak, winter on-peak, and summer semi-peak periods received a credit that effectively reduced the project bid price, whereas projects that provided a greater proportion of annual deliveries in summer and winter off-peak periods received a debit that increased the project bid price. Baseload units deliver equally in all hours, which resulted in a net TOD Adjustment Adder at or close to zero.

<u>Transmission Cost Adder</u>: 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.

Resource Adequacy ("RA"): All bids received a credit based on the amount of Resource Adequacy ("RA") benefits provided by each bid and the value assigned to that capacity. The RA benefit (in MW) of a wind or solar resource is a fraction

of its capacity, derived from the Net Qualifying Capacity values that the CPUC counting rules have assigned to resources of that technology.

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. Congestion costs (\$/MWh) were calculated based on the difference between the hourly LMP at each generator's injection point 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. SDG&E subtracted the LMPs for each generator's injection point from the LMPs in SDG&E's LAP and multiplied the differences by the generator's hourly production profile (MWh). The congestion adder for each bid was the weighted average of the differences.

<u>Duration equalization adders ("Begin Effects" and "End Effects")</u>: SDG&E used weighted average bid prices from its 2008 shortlist as market replacement costs to normalize bids of different starting periods and terms. SDG&E then levelized each bid from 2009 through the end of the evaluation period, putting all projects on equal terms.

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)

SDG&E utilized TOD factors in its LCBF evaluation. The average all-in bid price was adjusted to reflect the relative value of projected energy deliveries during peak, semipeak and off-peak periods. The projected delivery profiles were 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.

| <u>SUMMER</u> | <u>WINTER</u> |
|---------------------------|---|
| July 1 - October 31 | November 1 – June 30 |
| Weekdays 11am – 7pm | Weekdays 1pm - 9pm |
| 1.6411 | 1.1916 |
| Weekdays 6am – 11am; | Weekdays 6am – 1pm; |
| Weekdays 7pm - 10pm | Weekdays 9pm – 10pm |
| 1.0400 | 1.0790 |
| All other hours 0.8833 | All other hours 0.7928 |
| | July 1 - October 31 Weekdays 11am - 7pm 1.6411 Weekdays 6am - 11am; Weekdays 7pm - 10pm 1.0400 All other hours |

SDG&E's standard TOD factors from the 2009 RFO are shown below:

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

In assessing this project's value, SDG&E considered viability factors such as the degree of experience of the developer, PV's technical feasibility, and the maturity of the photovoltaic supply chain, as well as the solar 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. <u>SPECIFIC PAGE AND SECTION NUMBER WHERE THE COMMISSION'S NON-MODIFIABLE</u> TERMS ARE LOCATED IN THE **PPA**.

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

| Non-Modifiable Term | PPA SECTION; PPA PAGE # |
|------------------------------------|---|
| STC 1: CPUC Approval | Section 1.1; Page 6 |
| STC 2: Green Attributes & RECs | Section 1.1; Page 11 Section 3.1(i); Page 24 |
| STC 6: Eligibility | Section 10.2(a); Page 49 |
| STC 17: Applicable Law | Section 13.8; Page 58 |
| STC REC-1: Transfer of RECs | Section 10.2(b); Page 50 |
| STC REC-2: WREGIS Tracking of RECs | Section 3.1(I) [last sentence]; Page 25 |

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 energy and REC transaction.

F. MINIMUM QUANTITY

MINIMUM CONTRACTING REQUIREMENTS APPLICABLE TO SHORT TERM CONTRACTS WITH EXISTING FACILITIES

Not applicable

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 a bilateral contract and is, therefore, not eligible for AMFs.

2. THE STATUS OF THE UTILITY'S AMFS LIMIT.

SDG&E's AMF limit has been exhausted.8

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

SDG&E proposes to voluntarily procure under this Proposed Agreement at costs that are above the MPR, conditioned upon Commission approval of recovery of all such costs through rates.

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.

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. 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

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

⁹ D.07-01-039, mimeo, p. 270.

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;

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

On both April 15, 2011 and May 20, 2011 the Project appeared on the regularly scheduled PRG Meeting agenda.

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 2009 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 2009 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 REPORT¹⁰

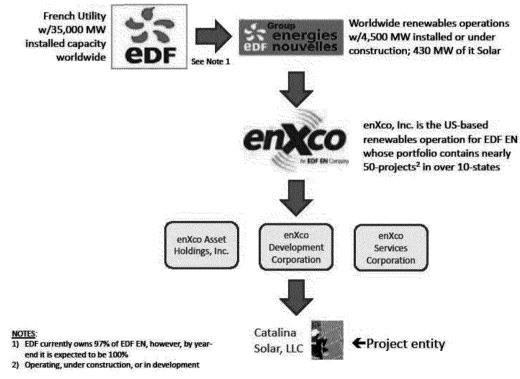


III. PROJECT DEVELOPMENT STATUS

A. COMPANY/DEVELOPMENT TEAM

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

enXco's roots go back to 1985 with O&M services for early wind projects. Over the ensuing decades they have developed three core competencies in the renewable energy space - project development, operations & maintenance, and asset management. In 2002 enXco was acquired by EDF—Energies Nouvelles (EDF EN). EDF EN's North American Headquarters is located in San Diego with three wholly-owned operating affiliates (enXco (USA), EDF EN Canada, and EDF EN Mexico) all reporting through Tristan Grimbert as President & CEO. EDF EN is a world-class player in the green electricity generation market with a presence in 9 European countries as well as North America. They operate in four energy segments (solar, wind, hydro, and biomass) as an integrated operator whose presence spans the entire renewables project value chain from development and construction through to generation and operation & maintenance. Ultimately enXco rolls up to EDF Group the French utility – one of the world's largest energy providers. Four of the world's 50 largest operating solar Photovoltaic power plants are from the EDF EN/enXco organization.¹¹



A full printed copy of this public IE Report is located at the end of Part 2 of this Advice Letter

Arnprior/Lombardy/St Isidore (all Canada) & Le Gabardan (France) www.pvresources.com/en/top50pv.php

2. <u>SUCCESSFUL PROJECTS</u> (RENEWABLE AND CONVENTIONAL)

Solar continues to be a growing component of their renewables portfolio. Representative completed and operating projects by enXco and its affiliates include:

Solar

- 23 MWp Arnprior (2009)
- 65 MWp La Garbardan (2010)
- 24 MWp Lombardy (2010)
- 24 MWp St. Isidore (2010/2011)

Other Renewables

- 56 MW Passarel-Kokaliane (hydro 2002)
- 49 MW Prin-Spanchevo (hydro 2002)
- 1.2 MW La Ciotat (biogas 2009)
- 50 MW Beacon (biogas 2010)

Wind

- 60 MW Oasis (2004)
- 206 MW Fenton (2007)
- 240 MW Ventominho (2008)
- 150 MW Shiloh (2009)

Conventional

- 74,300 MW Nuclear
- 25,400 MW Coal & Oil
- 9,400 MW Gas & Cogen

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. PV modules may be sourced from multiple major suppliers in order to ensure achievement of target project costs and minimize single-source risks.

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.¹²

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.¹³

[&]quot;Solar Expected to Maintain its Status as the World's Fastest-Growing Energy Technology" www.socialfunds.com/news/article.cgi/2639.html

[&]quot;Large-scale photovoltaic power plants" www.pvresources.com/en/top50pv.php

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 has been undertaken by enXco and its parent organization. Such assessment utilized SUNY and SPP satellite data along with TMY3 data set files from multiple local area observation sites as well as RETscreen, software. Data were reasonably consistent with a standard deviation of only 15 between data sets. The estimated annual global horizontal solar resource in this Mojave Desert region is estimated to be between 2050 and 2100 kWh/m² per year or 5.62 to 5.75 kWh/m² per day.

Additionally, a met station has been installed at the site and is now collecting data.

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

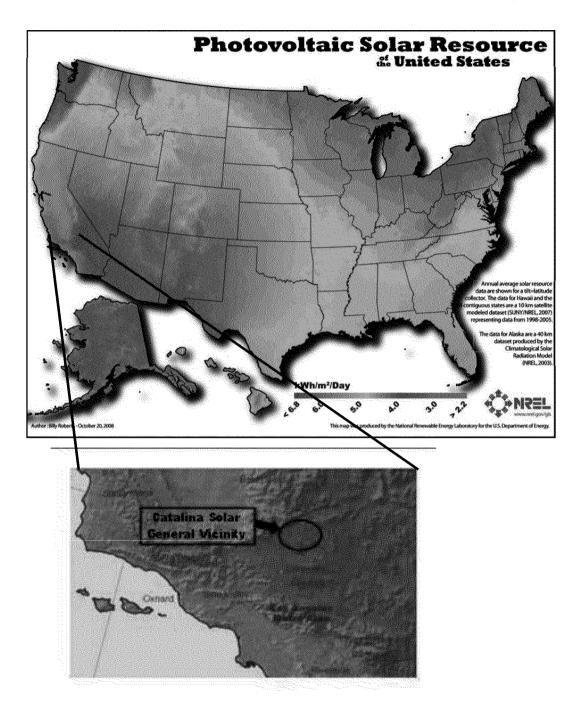
Not applicable. This proposed solar project will not depend on biomass fuel.

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. In general, resources above 4 kWh/m² per day are considered the strongest. 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.

According to enXco, water for the project will be supplied by off-site sources. enXco has confirmed the availability of water and is in late-stage negotiations of the water supply agreements from a primary source as well as a backup source. In general, water will be delivered to the O&M facility via pipeline or truck and stored in above ground tanks at the O&M facility. Water for the purpose of panel washing will be transported via truck from the O&M facility to the panel array as necessary.

enXco's resource assessment team has also identified that well water would also likely be an acceptable choice. As such, before finalizing the final contract for water supply, enXco will evaluate all options to determine the optimal choice of water supply.

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.) enXco estimates that annual water usage for these purposes would be up to 13.6 million gallons/year or 41 acre-feet. The bulk of the water will be used for panel washing. Actual water usage will depend on weather conditions and panel soiling.

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 enXco, 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. Purchased land is currently secured with purchase options.

i. <u>DURATION OF SITE CONTROL AND ANY EXERCISABLE EXTENSION OPTIONS (LEASE ONLY)</u>

The duration of site control for leases are for a term of 30-years. Most leases were executed between 2008 and 2010.

ii. <u>Level or percent of site control attained - if less than 100%, discuss seller's plan for obtaining full site control</u>

Site control, in the form of long-term leases and land purchase options, has been obtained for 100% of the Catalina Solar Project site. Land control has also been attained for 100% of enXco's 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.).

The developer is in the process of finalizing solar panel selection.

b. THE DEVELOPER'S HISTORY OF ABILITY TO PROCURE EQUIPMENT.

enXco's worldwide renewable energy portfolio affords them with ongoing relationships with multiple solar panel vendors including frame agreements.

c. <u>IDENTIFIED EQUIPMENT PROCUREMENT ISSUES</u>, <u>SUCH AS LEAD TIME</u>, <u>AND THEIR EFFECT ON THE PROJECT'S DATE OF OPERABILITY</u>.

There are 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 Catalina Solar project's CEC-RPS-1B Application for Pre-Certification California Renewables Portfolio Standard Program has been sent to the CEC. There is no reason to believe that there is any uncertainty related to the CEC's approval of a 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 Catalina 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.

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.

An Interconnection Request for the Project was submitted to the CAISO and the CAISO Phase I Interconnection Study has been completed. The Phase II Interconnection Study process has begun and the developer has posted the required security deposit with the CAISO. Phase 2 Study results are due in August 2011.

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

A draft Generator Interconnection Agreement ("GIA") is expected to be issued during Q3 2011.

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

The CAISO Phase I Study results indentified 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. <u>TIMING AND PROCESS FOR ALL TRANSMISSION-RELATED UPGRADES, INCLUDING</u> 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. <u>ISSUES RELATING TO OTHER GENERATING FACILITY PROJECTS IN THE TRANSMISSION</u> QUEUE AS THEY MAY AFFECT THE PROJECT.

Information about Catalina 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. <u>ALTERNATIVE TRANSMISSION ARRANGEMENTS AVAILABLE AND/OR CONSIDERED TO</u> 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. <u>DEVELOPER'S MANNER OF FINANCING (E.G. PROJECT FINANCING, BALANCE SHEET FINANCING, UTILITY TAX EQUITY INVESTMENT, ETC.)</u>

Like most renewable projects, the Catalina 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 enXco's financing plans.

2. DEVELOPER'S GENERAL PROJECT FINANCING STATUS.

See Section F—Financing Plan of Confidential Appendix A-Project Development Status for information about enXco's financing plans.

3. THE EXTENT (%)THE DEVELOPER RECEIVED FIRM COMMITMENTS FROM FINANCERS (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 enXco's 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 enXco's financing plans.

5. CREDITWORTHINESS OF ALL RELEVANT FINANCIERS.

See Section F–Financing Plan of Confidential Appendix A-Project Development Status for information about enXco's financing plans.

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

enXco and its parent, EDF EN, are experienced renewables project developers. Collectively they have successfully closed financing on over 3400 MW of operating renewable assets.

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 enXco's 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 December 1, 2011.

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.
- 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.

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 August 23, 2011, 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 <u>and</u> 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. 858-654-1788
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 December 1, 2011.

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) 654-1788 or by e-mail to SDG&ETariffs@semprautilities.com.

CLAY FABER
Director – Regulatory Affairs

(cc list enclosed)

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: | Contact Person: <u>Joff Morales</u> | | | |
| ⊠ ELC ☐ GAS | Phone #: (858) <u>650-4098</u> | | | |
| ☐ PLC ☐ HEAT ☐ WATER | E-mail: jmorales@semprautilities.com | | | |
| EXPLANATION OF UTILITY TY | PE | (Date Filed/ Received Stamp by CPUC) | | |
| ELC = Electric GAS = Gas PLC = Pipeline HEAT = Heat V | VATER = Water | | | |
| Advice Letter (AL) #: 2276-E | | | | |
| Subject of AL: <u>Request for Approval</u> LLC. | of a Renewable Po | ower Purchase Agreement with Catalina Solar, | | |
| Keywords (choose from CPUC listing | : Procurement, P | ower Purchase Agreement | | |
| AL filing type: Monthly Quarte | rly 🗌 Annual 📗 Oi | ne-Time 🛛 Other | | |
| If AL filed in compliance with a Com | - | | | |
| • | · | tify the prior AL: None thdrawn or rejected AL¹: N/A | | |
| Does AL request confidential treatme | ent? If so, provide ex | xplanation: None | | |
| Resolution Required? 🛛 Yes 🗌 No | | Tier Designation: 🔲 1 🔲 2 🔀 3 | | |
| Requested effective date: 12/1/2013 | <u> </u> | No. of tariff sheets: <u>0</u> | | |
| Estimated system annual revenue ef | fect: (%):N/A | | | |
| Estimated system average rate effect | (%): <u>N/A</u> | | | |
| 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: | | | | |
| Service affected and changes proposed ¹ : None | | | | |
| Pending advice letters that revise the same tariff sheets: None | | | | |
| 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 | Sa | an Diego Gas & Electric | | |
| Attention: Tariff Unit 505 Van Ness Ave., | 0 | Attention: Megan Caulson | | |
| San Francisco, CA 94102 | | 330 Century Park Ct, Room 32C an Diego, CA 92123 | | |
| mas@cpuc.ca.gov and jnj@cpuc.ca.gov | | caulson@semprautilities.com | | |

 $^{^{\}rm 1}$ Discuss in AL if more space is needed.

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

cc: (w/enclosures)

V. Gan

W. Chen

A. Friedl

E. O'Neill

J. Pau

CP Kelco

Constellation New Energy

Davis Wright Tremaine, LLP

Public Utilities Commission Dept. of General Services Shute, Mihaly & Weinberger LLP O. Armi DRA H. Nanio D. Appling M. Clark Solar Turbines S. Cauchois Douglass & Liddell F. Chiang Sutherland Asbill & Brennan LLP J. Greia D. Douglass R. Pocta D. Liddell K. McCrea W. Scott G. Klatt Southern California Edison Co. Duke Energy North America M. Alexander **Energy Division** P. Clanon M. Gillette K. Cini K. Gansecki S. Gallagher Dynegy, Inc. H. Gatchalian J. Paul H. Romero Ellison Schneider & Harris LLP D. Lafrenz TransCanada M. Salinas E. Janssen R. Hunter Energy Policy Initiatives Center (USD) D. White CA. Energy Commission F. DeLeon S. Anders **TURN Energy Price Solutions** R. Tavares M. Florio Alcantar & Kahl LLP A. Scott M. Hawiger Energy Strategies, Inc. K. Harteloo **UCAN** M. Shames American Energy Institute K. Campbell U.S. Dept. of the Navy C. King M. Scanlan **APS Energy Services** Goodin, MacBride, Squeri, Ritchie & Day K. Davoodi B. Cragg N. Furuta J. Schenk **BP Energy Company** J. Heather Patrick L. DeLacruz Utility Specialists, Southwest, Inc. J. Zaiontz J. Squeri Barkovich & Yap, Inc. Goodrich Aerostructures Group D. Koser B. Barkovich M. Harrington Western Manufactured Housing Hanna and Morton LLP **Communities Association Bartle Wells Associates** R. Schmidt N. Pedersen S. Dev Braun & Blaising, P.C. Itsa-North America White & Case LLP S. Blaising L. Belew L. Cottle California Energy Markets J.B.S. Energy **Interested Parties** S. O'Donnell J. Nahigian R.11-05-005 C. Sweet Luce, Forward, Hamilton & Scripps LLP California Farm Bureau Federation J. Leslie K. Mills Manatt, Phelps & Phillips LLP California Wind Energy D. Huard N. Rader R. Keen Matthew V. Brady & Associates Children's Hospital & Health Center T. Jacoby M. Brady Modesto Irrigation District City of Chula Vista M. Meacham C. Mayer Morrison & Foerster LLP E. Hull City of Poway P. Hanschen MRW & Associates R. Willcox City of San Diego D. Richardson J. Cervantes Pacific Gas & Electric Co. G. Lonergan J. Clark M. Valerio M. Huffman Commerce Energy Group S. Lawrie E. Lucha

Pacific Utility Audit, Inc.

San Diego Regional Energy Office

School Project for Utility Rate Reduction

E. Kelly

C. Elder

J. Porter

R. W. Beck, Inc.

S. Freedman

M. Rochman

San Diego Gas & Electric Advice Letter 2276-E August 3, 2011

ATTACHMENT A

DECLARATION OF THOMAS C. SAILE REGARDING CONFIDENTIALITY OF CERTAIN DATA

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF THOMAS C. SAILE REGARDING CONFIDENTIALITY OF CERTAIN DATA

I, Thomas C. Saile, do declare as follows:

- 1. I am an Energy Contracts Originator for San Diego Gas & Electric Company ("SDG&E"). I have reviewed Advice Letter 2276-E, requesting approval of an renewable Power Purchase Agreement (PPA) with Catalina Solar, LLC (with attached confidential and public appendices), dated August 3, 2011 ("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"). In addition, the Commission has made clear that information must be protected where "it matches a Matrix category exactly or consists of information from which that information may be easily derived."

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.

² 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).

- 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. 3/
- 4. <u>SDG&E's Protected Information</u>: 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:^{4/}

| Data at issue | D.06-06-066 Matrix Requirements | How moving party meets requirements |
|---|--|--|
| Bid Information ⁵ Locations: 1. Confidential Appendix A • Consistency with Commission Decisions and | Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix | The data provided is non-public bid data from SDG&E's Renewable RFOs. |
| Rules section, paragraph C.2 (Portfolio Fit) – embedded SDG&E's LCBF Ranking for the 2009 RPS | Identify the Matrix category or categories to which the data corresponds | This information is protected under IOU Matrix category VIII.A. |
| RFO and Application of TOD Factors on p.4; Project Development Status section, paragraph E.4. – | Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix | In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that |

 $^{^{3/2}}$ D.06-06-066, as amended by D.07-05-032, *mimeo*, p. 81. Ordering Paragraph 2.

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").

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

| Data at issue | D.06-06-066 Matrix | How moving party |
|--|---|--|
| Transmission Details table on p.40; Project Development Status section, paragraph G.2. – Project Viability Calculator (PVC) scoring and associated narrative and embedded file on p. 41; Project Development Status section, paragraph G.3. – RPS Workpaper Graphs – "Viability of 2009 Bids by Technology and "Viability of 2009 Shortlisted vs Rejected Bids on p.42-43; Project's PVC results, paragraph G.4. – Project Viability Calculator (PVC) scoring, narrative and comparison on p.441. Confidential Appendix B – embedded 2009 Solicitation Overview Report on p.45. Confidential Appendix C – embedded project specific IE Report on p. 46. Confidential Appendix D Contract Summary Section, paragraph E-12, Graphs from RPS Workpapers – "RPS Solicitation BSC - 2009 – All Bids vs Current Shortlist"; "2009 RFO Mean and Median Bid Prices by Technology" on p.61-62. | D.06-06-066 Matrix Requirements for that type of data Affirm that the information is not already public Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure. | How moving party meets requirements this information be kept confidential until the final contracts from each of the RFOs have been submitted to the CPUC for approval. SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party. SDG&E cannot summarize or aggregate the bid data while still providing project- specific details. SDG&E cannot provide redacted or masked versions of these data points while maintaining the format requested by the CPUC. |
| | Daniel de d | TILL AVE TO COLORS |
| Specific Quantitative Analysis ⁶ | Demonstrate that the material submitted | This data is SDG&E's specific quantitative |

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 $^{^6}$ The confidential information referenced has a BLUE font color / has a blue box around it in the confidential appendices

| D.06-06-066 Matrix | How moving party |
|---------------------------------------|--|
| | meets requirements |
| l - | analysis involved in |
| * * | scoring and evaluating |
| the IOU Matrix | renewable bids. Some |
| | of the data also involves |
| | analysis/evaluation of |
| | proposed RPS projects. |
| Identify the Matrix | This information is |
| category or categories | protected under IOU |
| to which the data | Matrix categories VII.G |
| corresponds | and/or VIII.B. |
| Affirm that the IOU is | In accordance with the |
| complying with the | limitations on |
| limitations on | confidentiality set forth |
| confidentiality | in the IOU Matrix, |
| specified in the Matrix | SDG&E requests that |
| for that type of data | this information be kept |
| • • | confidential for three |
| | years. |
| Affirm that the | SDG&E has not publicly |
| information is not | disclosed this |
| already public | information and is not |
| , , , , , , , , , , , , , , , , , , , | aware that it has been |
| | disclosed by any other |
| | party. |
| Affirm that the data | SDG&E cannot |
| cannot be aggregated, | summarize or aggregate |
| | the evaluation data while |
| masked or otherwise | still providing project- |
| protected in a way that | specific details. SDG&E |
| * | cannot provide redacted |
| disclosure. | or masked versions of |
| | these data points while |
| | maintaining the format |
| | requested by the CPUC. |
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| | Requirements constitutes a particular type of data listed in the IOU Matrix Identify the Matrix category or categories to which the data corresponds Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data Affirm that the information is not already public Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial |

| Data at issue | D.06-06-066 Matrix | How moving party |
|--|--------------------|--------------------|
| | Requirements | meets requirements |
| · Consistency with | | - |
| Commission Decisions and | | |
| Rules section, paragraph I – | | |
| AMFs on p.36; | | |
| Project Development Status | | |
| section, paragraph G.2. – | | |
| Project Viability Calculator | | |
| (PVC) scoring and | | |
| associated narrative and | | |
| embedded file on p. 41; | | |
| Project Development Status | | |
| section, paragraph G.3. – | | |
| RPS Workpaper Graphs – | | |
| "Viability of 2009 Bids by | | |
| Technology"; "Viability of | | |
| 2009 Shortlisted vs Rejected | | |
| Bids'' on p.42-43; | | |
| Project Development Status | | |
| section, paragraph G.4. | | |
| "The Project's PVC | | |
| Results"; on p.44; | | |
| 2. Confidential Appendix B – | | |
| embedded 2009 Solicitation | | |
| Overview Report on p.452. | | |
| 3. Confidential Appendix C – | | |
| Final RPS Project-Specific | | |
| Independent Evaluator | | |
| Report on p.46. | | |
| 4. Confidential Appendix D | | |
| Contract Summary Section | | |
| Paragraph E.1 – analysis of | | |
| pricing and payment | | |
| information in table and | | |
| footnote on p.56; | | |
| · Contract Summary section, | | |
| paragraph E.10, AMF | | |
| calculations table, AMF | | |
| Results Pages, and | | |
| embedded AMF calculator | | |
| files on p.58-60; | | |
| · Contract Summary Section, | | |
| paragraph E-12, Graphs | | |
| from RPS Workpapers – | | |
| "RPS Solicitation BSC - | | |

| Data at issue | D.06-06-066 Matrix | How moving party |
|--|--------------------------|---------------------------|
| | Requirements | meets requirements |
| 2009 – All Bids vs Current | | |
| Shortlist"; "2009 RFO | | |
| Mean and Median Bid | | |
| Prices by Technology" on | | |
| p.61-62. | | |
| Contract Summary section, | | |
| paragraph E.13, Contract | | |
| Price Comparisons on p.64. | | |
| Contract Terms ⁷ | Demonstrate that the | This data includes |
| | material submitted | specific contract terms. |
| Locations: | constitutes a particular | 1 |
| 2. Confidential Appendix A | type of data listed in | |
| · Consistency with | the IOU Matrix | |
| Commission Decisions and | Identify the Matrix | This information is |
| Rules section paragraph D | category or categories | protected under IOU |
| – Standard Terms and | to which the data | Matrix category VII.G. |
| Conditions, Non-modifiable | corresponds | |
| and Modifiable Contract | Affirm that the IOU is | In accordance with the |
| Terms Summary Table | complying with the | limitations on |
| (Modifiable Terms) and | limitations on | confidentiality set forth |
| Modifiable Terms Red-line | confidentiality | in the IOU Matrix, |
| table on p. 8;12-35; | specified in the Matrix | SDG&E requests that |
| Project Development Status | for that type of data | this information be kept |
| Paragraph B.1 – | | confidential for three |
| Technology Maturity | | years. |
| (narrative)on p.37; | Affirm that the | SDG&E has not publicly |
| , | information is not | disclosed this |
| • Project Development Status | already public | information and is not |
| Paragraph D - PTC/ITCs | | aware that it has been |
| (narrative)on p.39; | | disclosed by any other |
| · Project Development Status | | party. |
| Paragraph E.3. – Contract | Affirm that the data | In order to include as |
| Locational Attributes on | cannot be aggregated, | much detail as possible, |
| p.40. | redacted, summarized, | SDG&E has provided |
| 3. Confidential Appendix D | masked or otherwise | specific contract terms |
| · Contract Summary Section | protected in a way that | instead of summaries. |
| Paragraph C.1. – narrative | allows partial | SDG&E has provided |
| on p.49; | disclosure. | summaries of certain |
| · Contract Summary Section | | contract terms in public |
| Paragraph D.1. – Major | | portions of the |
| I an angli april 2.11. Intagor | | testimony. |

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 $^{^{7}}$ The confidential information referenced has a $\mbox{\bf RED}$ 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 |
|---------------|--|------------------------------------|-------------------------------------|
| | Contract Provisions (table) on p.50-55; | requirements | meets requirements |
| • | Contract Summary Section Paragraph D.2. – Major Contract Provisions Not in Table narrative on p.55; | | |
| • | Contract Summary Section Paragraph E.2 – narrative and table on p.56; | | |
| • | Contract Summary Section Paragraph E.3-5 narrative on p.57; | | |
| ٠ | Contract Summary Section Paragraph E.7. narrative on p. 58; | | |
| • | Contract Summary Section Paragraph E.8. – Indirect Expenses narrative on p.58; | | |
| • | Contract Summary Section Paragraph E.11. – MPR Explanation narrative on p.61; | | |
| • | Contract Summary Section Paragraph E.12 – RPS Contract Price Supply Curve Graph (2009 all executed contracts) on p.63; | | |
| ٠ | Contract Summary Section Paragraph E.14 – Rate Impact narrative and embedded rate impact calculation spreadsheets on p.64. | | |
| 4. | Confidential Appendix E | | |
| • | Embedded files containing comparison of Proposed Agreement with SDG&E's Pro Forma PPA on p.654. | | |
| 5. | Confidential Appendix F Embedded files –Executed Version of Proposed Agreement on p.66. | | |

| Data at issue | D.06-06-066 Matrix Requirements | How moving party meets requirements | |
|---|--|---|--|
| Analysis and Evaluation of Proposed RPS Projects ⁸ Locations: 1. Confidential Appendix A · Consistency with Commission Decisions and Rules section, Paragraph C.2. — Qualitative Factors — narrative on p.4-5; · Consistency with Commission Decisions and Rules section, Paragraph C.4. — How Project's Bid Ranking Changed — narrative on p.6-7; · Consistency with Commission Decisions and Rules section, Paragraph C.5. — Why the Submitted Contract was Preferred — narrative on p.7-8; · PRG Participation and Feedback narrative and embedded file, paragraph K | Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix Identify the Matrix category or categories to which the data corresponds Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix for that type of data | The Commission has concluded that Actual Procurement Percentage data must be protected in order to avoid disclosing SDG&E's Bundled Retail Sales data. ^{9/} This information is protected under IOU Matrix category VII.G. In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that the "front three years" of this information be kept | |
| | Affirm that the information is not already public | confidential. SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party. | |
| on p. 36; Project Development Status section, paragraph C.1. – Site Control – narrative on p.37; Project Development Status section, paragraph C.2. – Equipment Procurement – narrative on p.37; Project Development Status section, paragraph C.3. – Permitting Status – | 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 this data point in an aggregated, redacted, summarized or masked fashion. | |

 $^{^8}$ The confidential information referenced has a VIOLET font color / has a violet box around it in the confidential appendices $\underline{^{9/}}$ *Id*.

| Data at issue | D.06-06-066 Matrix Requirements | How moving party meets requirements | |
|--|--|--|--|
| narrative on p.37-38; Project Development Status section, paragraph E.1. – Electricity Delivery – narrative on p.39; Project Development Status section, paragraph F. – Financing Plan narrative on p.41; Confidential Appendix D Contract Summary section, paragraph A.1 and A.2 (narrative and maps) on p.48-497. IPT/APT Percentage 10 Locations: 1. Confidential Appendix A - Consistency with Commission Decisions and | Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix | 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 | |
| Rules section, paragraph A, the Project's contribution percentages to the SDG&E's RPS obligations on p.3. 2. Confidential Appendix D-Contract Summary section, paragraph B (narrative) on p.49. 3. Confidential Appendix G -table on p.68. | | calculate SDG&E's Total Energy Forecast – Bundled Customer (MWH). 111/ The same concern exists with regard to IPT percentage. | |
| | Identify the Matrix category or categories to which the data corresponds | This information is protected under IOU Matrix category V.C. | |
| | Affirm that the IOU is complying with the limitations on confidentiality specified in the Matrix | In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that | |

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

¹¹ See Administrative Law Index's Puling or See Diversion 2015 Fig. 10.

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 | |
|---------------|---|---|--|
| | for that type of data | 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 <u>alternative</u> 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.

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

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,

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.")

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. 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. 13/
- 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 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.

^{12/} See also Govt. Code § 6254.7(d).

 $[\]frac{13}{}$ See, D.06-06-066, mimeo, pp. 26-28.

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 3rd day of August, 2011, at San Diego, California.

Thomas C. Saile

Energy Contracts Originator Electric and Fuel Procurement

San Diego Gas & Electric

August 3, 2011

ATTACHMENT B

REQUEST FOR APPROVAL OF A RENEWABLE POWER PURCHASE AGREEMENT WITH CATALINA SOLAR, LLC

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: Comparison of Contract with Utility's

Pro Forma Power Purchase Agreement

Appendix F: Power Purchase Agreement

Appendix G: Project's Contribution Toward RPS Goals

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 RPSP ROJECTS (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/APTP ERCENTAGES (V.C)

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Confidential Appendix A*

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Consistency with Commission Decisions and Rules and Project Development Status

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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

Part 1 of this Advice Letter demonstrates how the Proposed Agreement is consistent with SDG&E's RPS Plan. The Proposed Agreement provides SDG&E an opportunity for incremental RPS procurement beginning as early as Fall 2012.

B. BILATERALS

A discussion of how this project complies with requirements for bilateral transactions is provided in Part 1 of this Advice Letter.

C. LEAST-COST BEST-FIT - IF APPLICABLE

1. THE PROJECT'S BID SCORES UNDER SDG&E'S APPROVED LCBF EVALUATION CRITERIA.

| 2009 LCBF Criteria / Components | 106 MW | 110 MW |
|---------------------------------|--------|--------|
| Levelized Bid Price | | |
| Begin/End Affects Adder | | |
| TOD Adjustment Adder | | |
| TOD Cost Adder | | |
| TOD Value Adder | | |
| Net TOD Adjustment | | |
| TRCR Adder | | |
| Resource Adequacy Credit | | |
| Congestion Adder | | |
| Total LCBF Ranking Price | | |

2. 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

As discussed below, various factors which describe "portfolio fit" have been quantitatively and qualitatively evaluated. Each is presented in this section.

Attached below is SDG&E's LCBF Ranking for the 2009 RPS RFO with Catalina Solar added to the list.



* TRANSMISSION ADDER



* APPLICATION OF TODF ACTORS



* QUALITATIVE FACTORS



¹ CAISO's interconnection study process is such that two Phase 1 Clusters become input for the Phase 2 Study.



3. THE ADDERS APPLIED IN THE LCBF ANALYTICAL PROCESS AND THE IMPACT OF THOSE ADDERS ON THE PROJECT'S RANKING.



Pacific Wind is another enXco project





5. <u>USING LCBF CRITERIA AND OTHER RELEVANT CRITERIA, EXPLAIN WHY THE SUBMITTED CONTRACT WAS PREFERRED RELATIVE TO OTHER SHORTLISTED BIDS OR OTHER PROCUREMENT OPTIONS.</u>





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

Note: Decision D.08-04-009 removed STC 3, stating:

"Given implementation of SB 1036, STC 3 has no continuing relevance and should be deleted from the current 14 STCs"

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)

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STC 1: CPUC Approval (Non-Modifiable)

"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:

(a) approves this Agreement in its entirety,

- (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
- (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.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

STC 1: CPUC Approval (Non-Modifiable)

[Section 1.1, Pg 6]

"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:

- (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
- (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.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

STC 2: RECs and Green Attributes (Non-Modifiable)

"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;¹ (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green 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

STC 2: RECs and Green Attributes (Non-Modifiable)

[Section 1.1, Page 11]

"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 lawLaw, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state lawLaw, if applicable, and to a federal or state

party at the Green Tag Purchaser's discretion, and 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 "tipping fees" 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.

¹ 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.

Green Attributes. 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.

STC 6: Eligibility (Non-Modifiable)

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

Parallel Term in SDG&E - Catalina Solar PPA

agency or any other party at the Green Tag Purchaser's discretion, and 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 lawLaw, 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 "tipping fees" 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

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.

[Section 3.1(i), Pg 24]

Green Attributes. 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.

STC 6: Eligibility (Non-Modifiable)

[Section 10.2(a), Pg 49]

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

("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's 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.

STC 17: Applicable Law (Non-Modifiable)

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.

STC REC-1: Transfer of Renewable Energy Credits (Non-modifiable)

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 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.

STC REC-2: Tracking of RECs in WREGIS. (Non-modifiable)

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.

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("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in lawLaw 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.

STC 17: Applicable Law (Non-Modifiable)

[Section 13.8, Pg 58]

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.

STC REC-1: Transfer of Renewable Energy Credits (Non-modifiable)

[Section 10.2(b), Pg 50]

Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the renewable energy creditsRenewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities CommissionCPUC Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities CommissionCPUC or by subsequent legislation. To the extent a change in lawLaw 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 lawLaw.

STC REC-2: Tracking of RECs in WREGIS. (Non-modifiable)

[Section 3.1(I) last sentence, Pg 25]

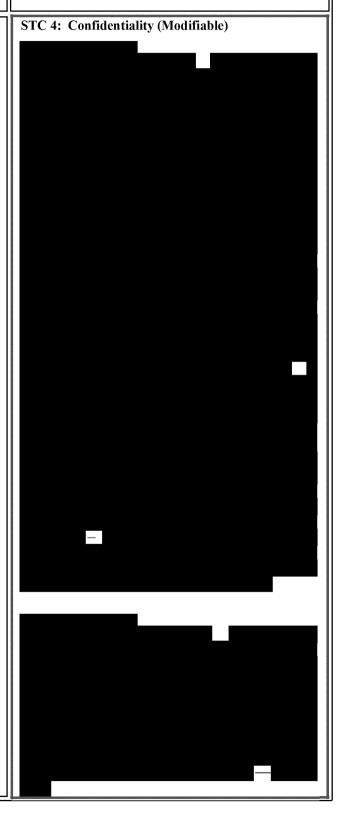
Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System WREGIS will be taken prior to the first delivery under the contract Agreement.

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STC 4: Confidentiality (Modifiable)

Confidentiality: Neither Party shall disclose the nonpublic terms or conditions of this Agreement or any Transaction hereunder to a third party, other than (i) the Party's employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, 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 over the disclosing Party ('Disclosing Party'), other than 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 ('Disclosure Order') each Party shall, to the extent practicable, use reasonable efforts: (i) to notify the other Party prior to disclosing the confidential information and (ii) prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

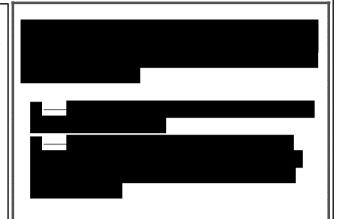
10.12 RPS Confidentiality. Notwithstanding Section 10.11 of this Agreement at any time on or after the date on which the Buyer makes its advice filing letter seeking CPUC Approval of the Agreement either Party shall be permitted to disclose the following terms with respect to such Transaction: Party names, resource type, delivery term, project location, and project capacity.



If Option B is checked on the Cover Sheet, neither Party shall disclose party name or project location, pursuant to this Section 10.12, until six months after such CPUC Approval.

- * Option B RPS Confidentiality Applicable. If not checked, inapplicable
- * Option C Confidentiality Notification: If Option C is checked on the Cover Sheet, Seller has waived its right to notification in accordance with Section 10.11 (v).

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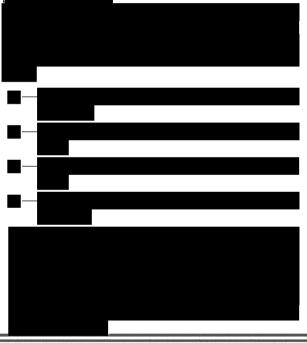
STC 5: Contract Term (Modifiable)

Delivery Term: The Parties shall specify the period of Product delivery for the 'Delivery Term,' as defined herein, by checking one of the following boxes:

- * Delivery shall be for a period of ten (10) years.
- * Delivery shall be for a period of fifteen (15) years.
- * Delivery shall be for a period of twenty (20) years.
- * Non-standard Delivery shall be for a period of ___ years.

If the "Non-standard Delivery" contract term is selected, Parties need to apply to the CPUC justifying the need for non-standard delivery.

STC 5: Contract Term (Modifiable)



STC 7A: Performance Standards/Requirements (Modifiable)

A. The following shall be included in the applicable post Commercial Operation Date performance standards/requirement provisions of the Agreement or Confirmation for "As Available" projects:

NOTE: since this is an 'As-Available' contract only those performance STCs relating to As-Available deals will be covered here, i.e., 7A & 7B

STC 7A: Performance Standards/Requirements (Modifiable)

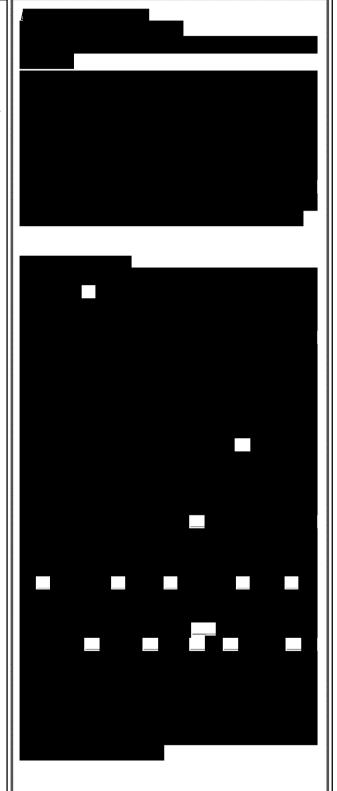


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"Energy Production Guarantees

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 Section ___ of this Agreement, "Excuses for Failure to Perform."

Guaranteed Energy Production = _____MWh."



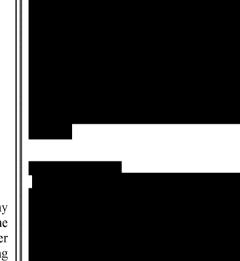
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STC 7B: Performance Standards/Requirements (Modifiable)

B. The following shall be included in the applicable performance standards/requirement provisions, as "Excuses for Failure to Perform" in the Agreement or Confirmation for "As Available" projects:

(Modifiable)

STC 7B: Performance Standards/Requirements



"Seller shall not be liable to Buyer for any damages determined pursuant to Article Four of the Agreement in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- i. if the specified generation asset(s) are unavailable as a result of a Forced Outage (as defined in the NERC Generating Unit Availability Data System (GADS) Forced Outage reporting guidelines) and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- ii. Force Majeure;
- iii. by the Buyer's failure to perform;

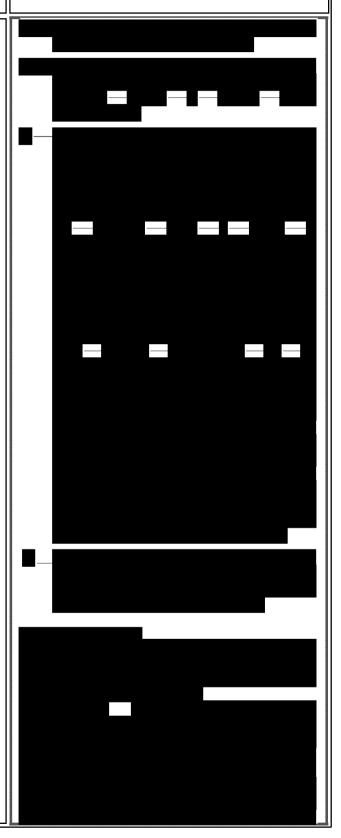
iv. by scheduled maintenance outages of the specified units;

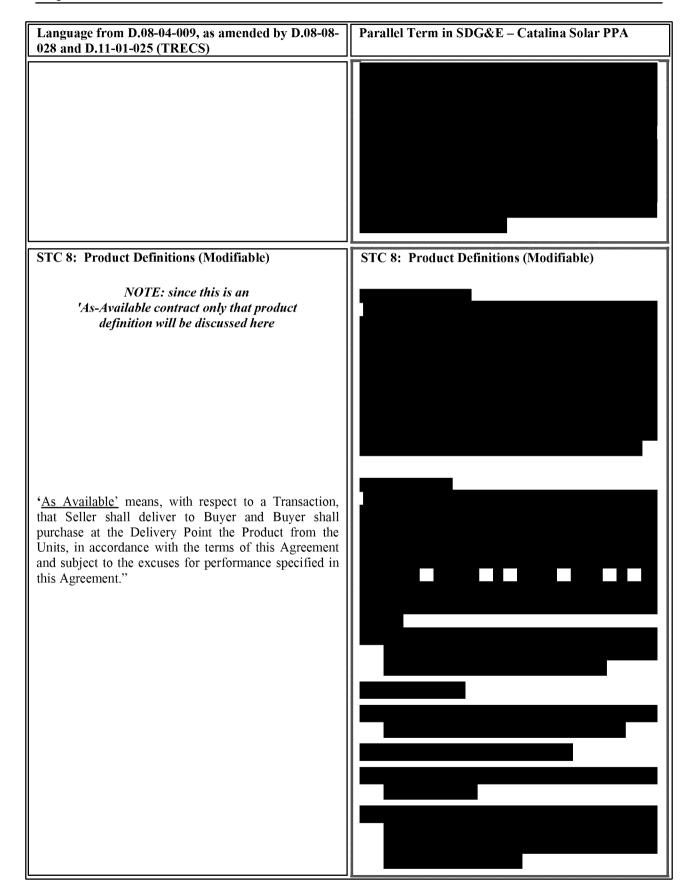
v. a reduction in Output as ordered under terms of the dispatch down and Curtailment provisions (including CAISO or Buyer's system emergencies); or

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 units' technical specifications; OR 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) by the Seller's failure to perform or (iii) during dispatch down periods."

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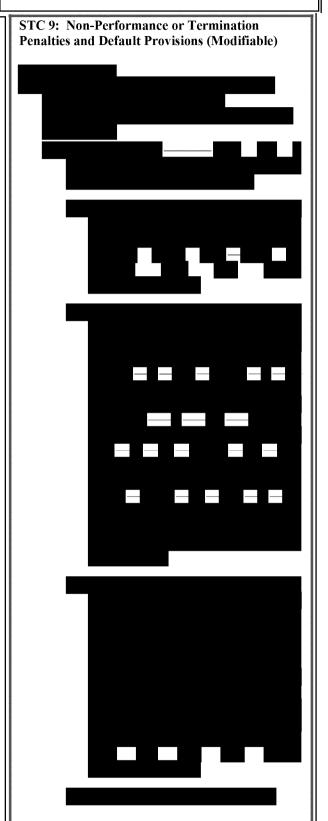




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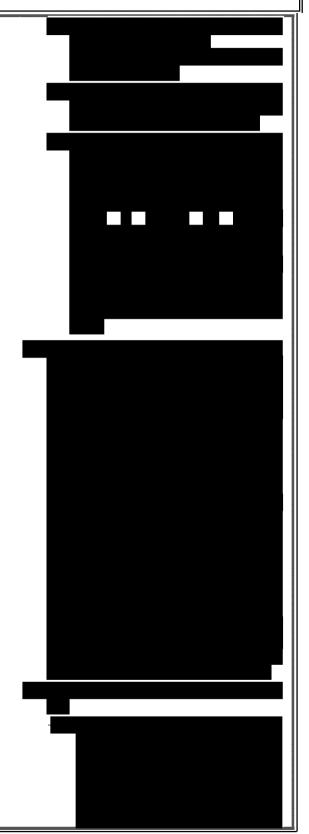
STC 9: Non-Performance or Termination Penalties and Default Provisions (Modifiable)

- 5.1 Events of Default. An 'Event of Default' shall mean, with respect to a Party (a 'Defaulting Party'), the occurrence of any of the following:
 - (a) the failure to make, when due, any payment required pursuant to this Agreement if such failure is not remedied within three (3) Business Days after written notice;
 - (b) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated or with respect to the representations and warranties made pursuant to Section 10.2 of this Agreement or any additional representations and warranties agreed upon by the parties, any such representation and warranty becomes false or misleading in any material respect during the term of this Agreement or any Transaction entered into hereunder;
 - (c) the failure to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party's obligations to deliver or receive the Product, the exclusive remedy for which is provided in Article Four) if such failure is not remedied within thirty (30) days after written notice;
 - (d) such Party becomes Bankrupt;



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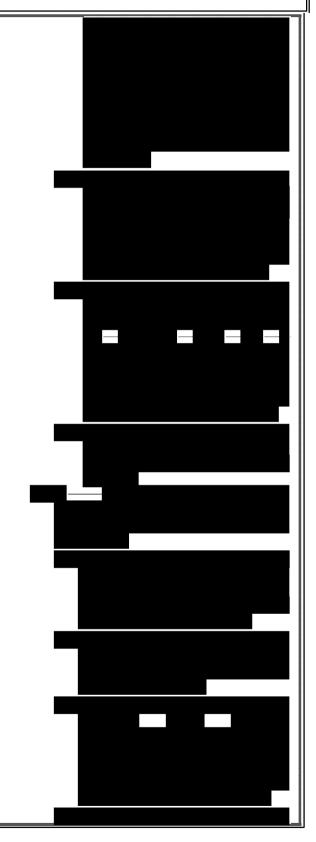
- (e) the failure of such Party to satisfy the creditworthiness/collateral requirements agreed to pursuant to Article Eight hereof;
- (f) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of law or pursuant to an agreement reasonably satisfactory to the other Party;
- if the applicable cross default section in the Cover Sheet is indicated for such Party, the occurrence and continuation of (i) a default, event of default or other similar condition or event in respect of such Party or any other party specified in the Cover Sheet for such Party under one or more agreements or instruments, individually or collectively, relating to indebtedness for borrowed money in an aggregate amount of not less than the applicable Cross Default Amount (as specified in the Cover Sheet), which results in such indebtedness becoming, or becoming capable at such time of being declared, immediately due and payable or (ii) a default by such Party or any other party specified in the Cover Sheet for such Party in making on the due date therefore one or more payments, individually or collectively, in an aggregate amount of not less than the applicable Cross Default Amount (as specified in the Cover Sheet);
- (h) with respect to such Party's Guarantor, if any:
 - (i) if any representation or warranty made by a Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated or with respect to the representations and warranties made

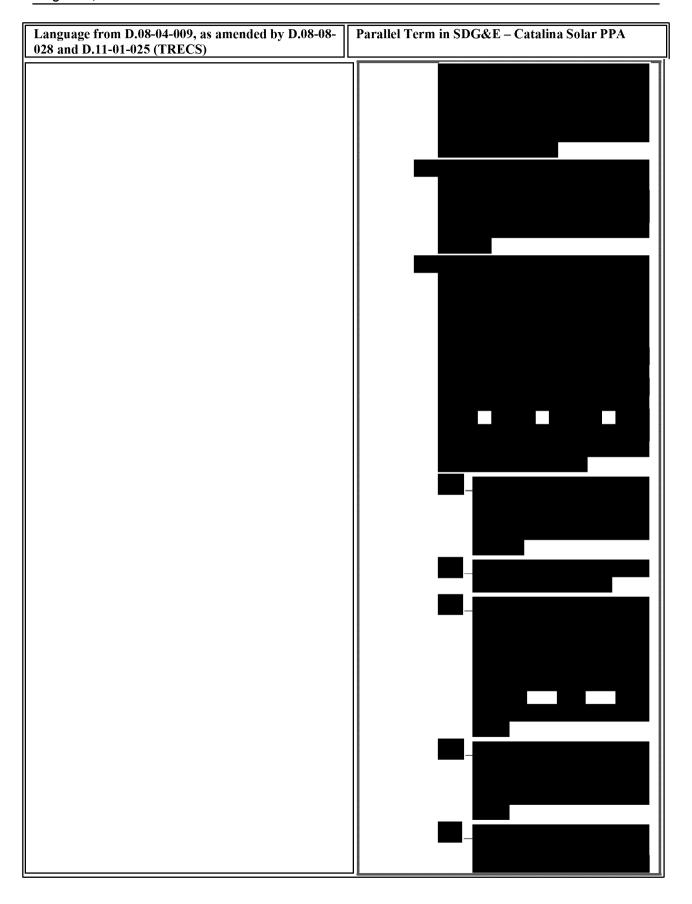


pursuant to Section 10.2 of this Agreement or any additional representations and warranties agreed upon by the parties, any such representation and warranty becomes false or misleading in any material respect during the term of this Agreement or any Transaction entered into hereunder;

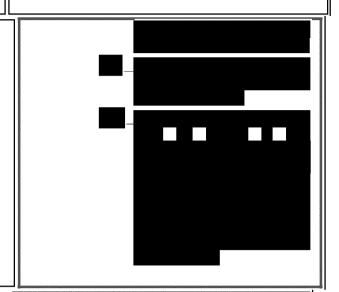
- (ii) the failure of a Guarantor to make any payment required or to perform any other material covenant or obligation in any guaranty made in connection with this Agreement and such failure shall not be remedied within three (3) Business Days after written notice;
- (iii) a Guarantor becomes Bankrupt; 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
- (iv) a Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any guaranty."
- (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);
- (j) failure to meet the performance requirements agreed to pursuant to Section __ hereof.

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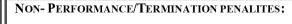


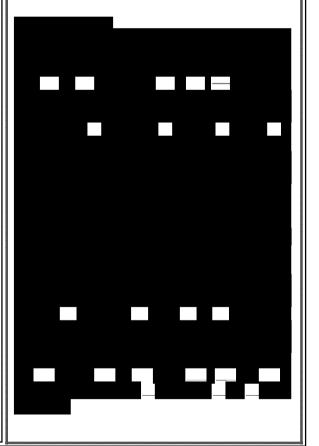
NON- PERFORMANCE/TERMINATION PENALITES:

The following modifications to Article One of the EEI Agreement are offered as "Non-Performance/Termination Penalties" for the Agreement:

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

" 'Gains' means with respect to any Party, an amount equal to the present value of the economic benefit 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 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 the value of Environmental Attributes."





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."

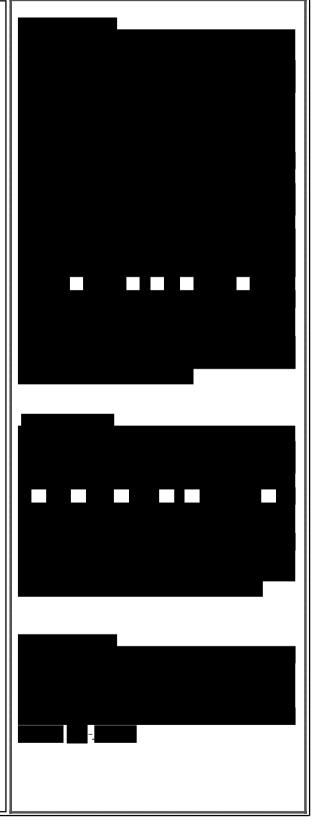
The definition of "Costs" shall be deleted in its entirety and replaced with the following:

" '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."

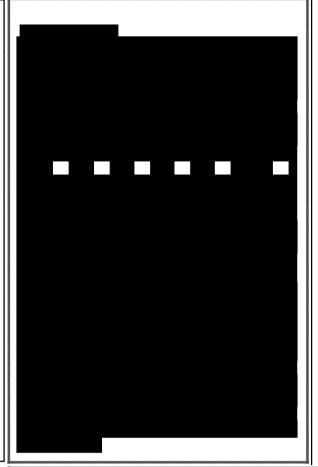
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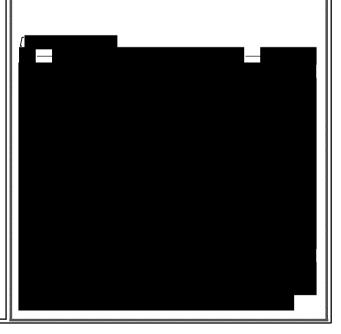
Section 5.2 of the Agreement shall be deleted in its entirety and replaced with the following:

Declaration of Early Termination Date and Calculation of Settlement Amounts. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party ('Non-Defaulting Party') shall have the right to (i) 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 early termination date ('Early Termination Date') to accelerate all amounts owing between the Parties and to liquidate and terminate all, but not less than all, Transactions (each referred to as a 'Terminated Transaction') between the Parties, (ii) withhold any payments due to the Defaulting Party under this Agreement and (iii) suspend performance. The Nondefaulting 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, endusers 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 Amount."



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:

"5.3 Net Out of Settlement Amounts. 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 liquidated amount (the 'Termination Payment'). If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero.

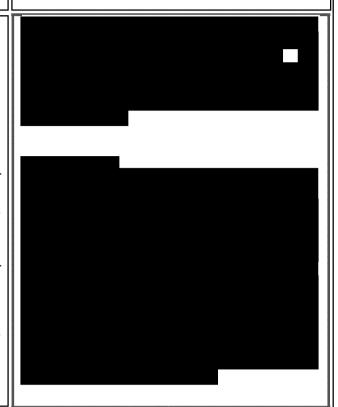


Language from D.08-04-009, as amended by D.08-08-Parallel Term in SDG&E – Catalina Solar PPA 028 and D.11-01-025 (TRECS) 5.4 Notice of Payment of Termination Payment. As soon as practicable after a liquidation, notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of 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.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute; provided, however, that if the Termination Payment is due from the Defaulting Party, the Defaulting Party shall first transfer Performance Assurance to the Non-defaulting Party in an amount equal to the Termination Payment.

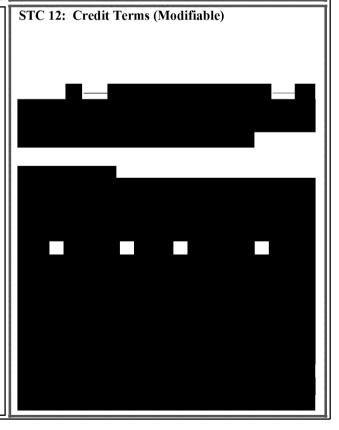
Parallel Term in SDG&E – Catalina Solar PPA



STC 12: Credit Terms (Modifiable)

Sections 8.1 through 8.3 of the EEI Agreement shall be adopted in their entirety for inclusion in the Agreement as follows:

- 8.1 Party A Credit Protection. The applicable credit and collateral requirements shall be as specified on the Cover Sheet and shall only apply if marked as "Applicable" on the Cover Sheet.
- Financial Information. Option A: (a) requested by Party A, Party B shall deliver (i) within 120 days following the end of each fiscal year, a copy of Party B's annual report containing audited consolidated financial statements for such fiscal year and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Party B's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and 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 Party B



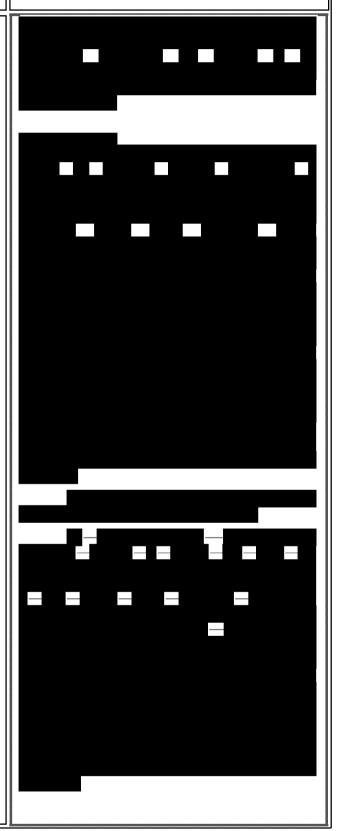
Parallel Term in SDG&E – Catalina Solar PPA

diligently pursues the preparation, certification and delivery of the statements.

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 the statements. of

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

(b) Credit Assurances. If Party A has reasonable grounds to believe that Party B's 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.

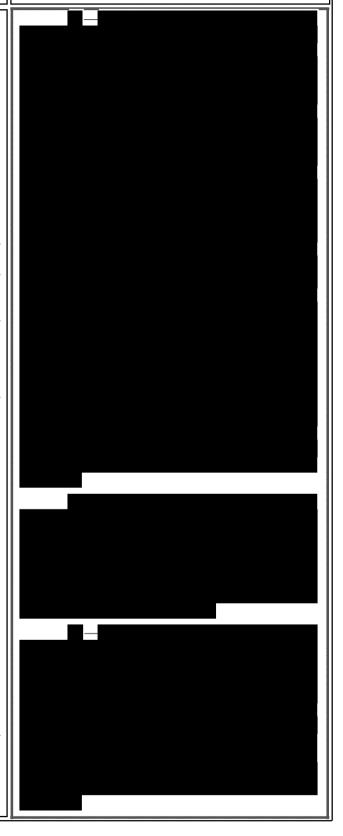


Collateral Threshold. If at any time and from time to time during the term of this Agreement (and notwithstanding whether an Event of Default has occurred), the Termination Payment that would be owed to Party A plus Party B's Independent Amount, if any, exceeds the Party B Collateral Threshold, then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

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.

(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.

Parallel Term in SDG&E - Catalina Solar PPA

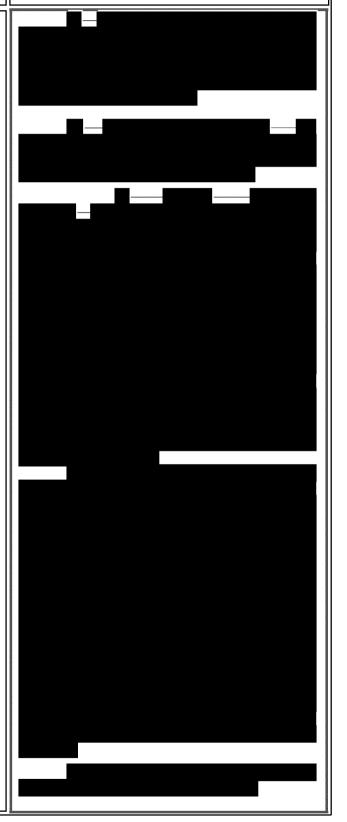


- (e) If specified on the Cover Sheet, Party B shall deliver to Party A, prior to or concurrently with the execution and delivery of this Master Agreement a guarantee in an amount not less than the Guarantee Amount specified on the Cover Sheet and in a form reasonably acceptable to Party A.
- 8.2 Party B Credit Protection. The applicable credit and collateral requirements shall be as specified on the Cover Sheet and shall only apply if marked as "Applicable" on the Cover Sheet.
- (a) Financial Information. Option A: If requested by Party B, Party A shall deliver (i) within 120 days following the end of each fiscal year, a copy of Party A's annual report containing audited consolidated financial statements for such fiscal year and (ii) within 60 days after the end of each of its first three fiscal quarters of each fiscal year, a copy of such Party's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and 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 such Party diligently pursues the preparation, certification and delivery of the statements.

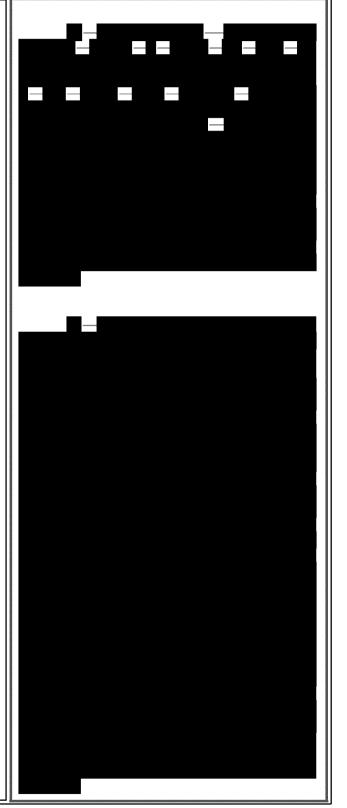
Option B: If requested by Party B, Party A shall deliver (i) within 120 days following the end of each fiscal year, a copy of the annual report containing audited consolidated financial statements for such fiscal year for the party(s) specified on the Cover Sheet and (ii) within 60 days after the end 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.

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

Parallel Term in SDG&E – Catalina Solar PPA



- Parallel Term in SDG&E Catalina Solar PPA
- (b) Credit Assurances. If Party B has reasonable grounds to believe that Party A's creditworthiness or performance under this Agreement has become unsatisfactory, Party B will provide Party A with written notice requesting Performance Assurance in an amount determined by Party B in a commercially reasonable manner. Upon receipt of such notice Party A shall have three (3) Business Days to remedy the situation by providing such Performance Assurance to Party B. In the event that Party A fails 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 under Article Five will be deemed to have occurred and Party B will be entitled to the remedies set forth in Article Five of this Master Agreement.
- 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 to Party B plus Party A's Independent Amount, if any, exceeds the Party A Collateral Threshold, then Party B, on any Business Day, may request that Party A provide Performance Assurance in an amount equal to the amount by which the Termination Payment plus Party A's Independent Amount, if any, exceeds the Party A Collateral Threshold (rounding upwards for any fractional amount to the next Party A Rounding Amount) ("Party A Performance Assurance"), less any Party A Performance Assurance already posted with Party B. Such Party A Performance Assurance shall be delivered to Party B 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 A, at its sole cost, may request that such Party A Performance Assurance be reduced correspondingly to the amount of such excess Termination Payment plus Party A's Independent Amount, if any, (rounding upwards for any fractional amount to the next Party A Rounding Amount). In the event that Party A fails to provide Party A 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 B will be entitled to the remedies set forth in Article Five of this Master Agreement.

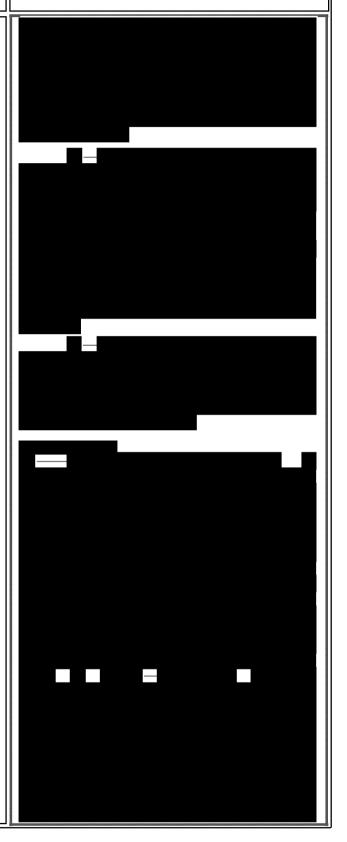


Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)

For purposes of this Section 8.2(c), the calculation of the Termination Payment shall be calculated pursuant to Section 5.3 by Party B as if all outstanding Transactions had been liquidated, and in addition thereto, shall include all amounts owed but not yet paid by Party A to Party B, whether or not such amounts are due, for performance already provided pursuant to any and all Transactions.

- (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.
- (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.
- Grant of Security Interest/Remedies. 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 firstpriority 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 or an Early Termination Date, 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

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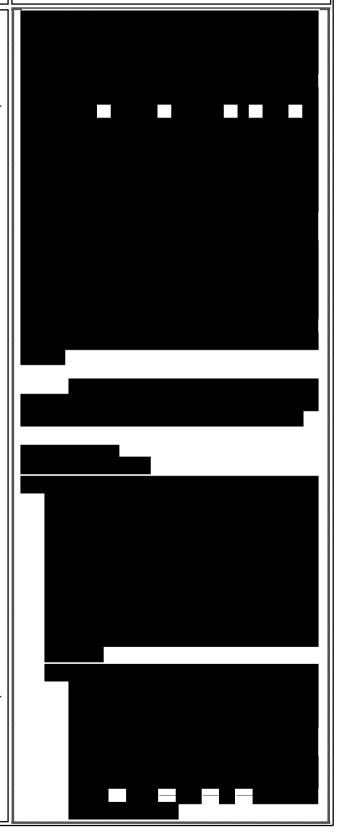
Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)

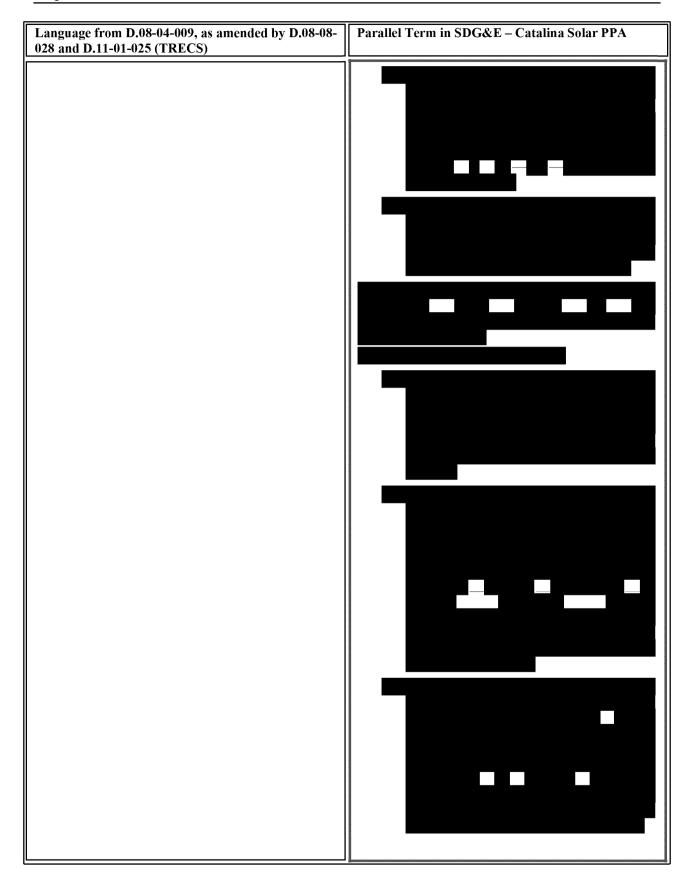
against any and all property of the Defaulting Party in the possession of the Non-Defaulting Party or its agent; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all Performance Assurance then held by or for the benefit of the Secured Party free from any claim or right of any nature whatsoever of the Defaulting Party, including any equity or right of purchase or redemption by the Defaulting Party. The Secured Party shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Pledgor's obligations under the Agreement (the Pledgor remaining liable for any amounts owing to the Secured Party after such application), subject to the Secured Party's obligation to return any surplus proceeds remaining after such obligations are satisfied in full."

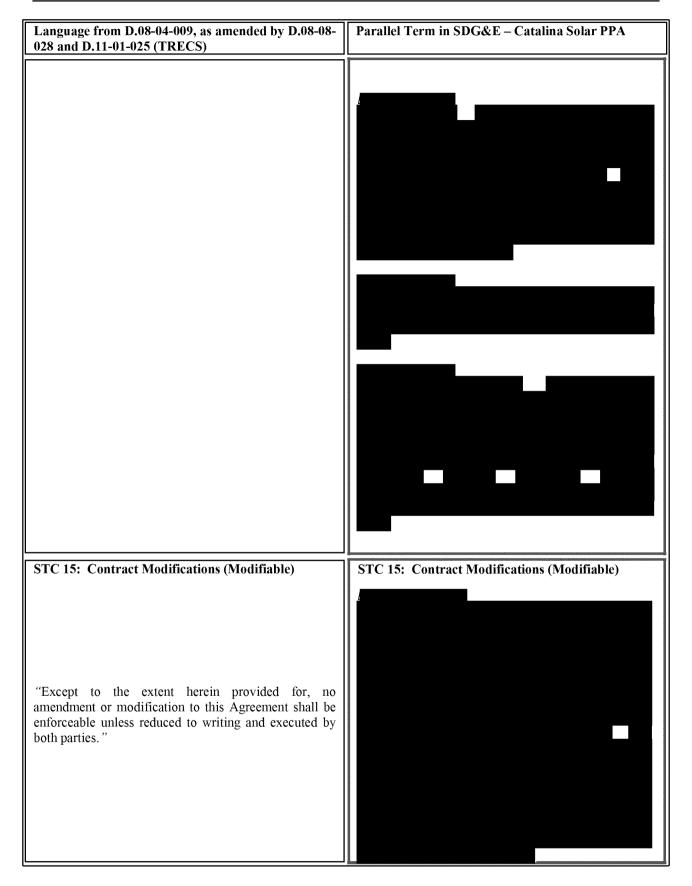
If the parties elect as being applicable on the Cover Sheet, the following new Section 8.4 shall be added to Article Eight of the EEI Master Agreement:

To secure its obligations under this Agreement, in addition to satisfying any credit terms pursuant to the terms of Section [8.1 or 8.2] to the extent marked applicable, Seller agrees to deliver to Buyer (the "Secured Party") within thirty (30) days of the date on which all of the conditions precedent set forth in Section are either satisfied or waived, and Seller shall maintain in full force and effect a) until the Commercial Operation Date a [INSERT TYPE OF COLLATERAL] in the amount of \$[], the form of which shall be determined in [the sole discretion of] [or] [by] Buyer and (b) from the Commercial Operation Date until the end of the Term [INSERT TYPE OF COLLATERAL]in the amount of \$[___], the form of which shall be determined [in the sole discretion of] [or][bv] the Buyer. Any such security shall not be deemed a limitation of damages."

Parallel Term in SDG&E - Catalina Solar PPA







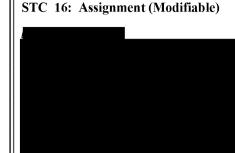
Language from D.08-04-009, as amended by D.08-08-028 and D.11-01-025 (TRECS)

Parallel Term in SDG&E – Catalina Solar PPA

STC 16: Assignment (Modifiable)

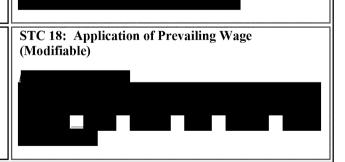
"Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld; provided, however,

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."



STC 18: Application of Prevailing Wage (Modifiable)

To the extent applicable, Seller shall comply with the prevailing wage requirements of Public Utilities Code section 399.14, subdivision (h).



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



I. AMFs



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.



L. INDEPENDENT EVALUATOR

The Independent Evaluator, PA Consulting, was involved in every step of the 2009 RPS RFO process and evaluated bids for the 2009 RPS RFO. The Independent Evaluator also monitored the progress of negotiations between the parties and provided information in this Advice Letter to evaluate the fairness of this Project's evaluation compared to other bids in the 2009 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 development team's 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. <u>DEVELOPMENT MILESTONES</u>

1. SITE CONTROL

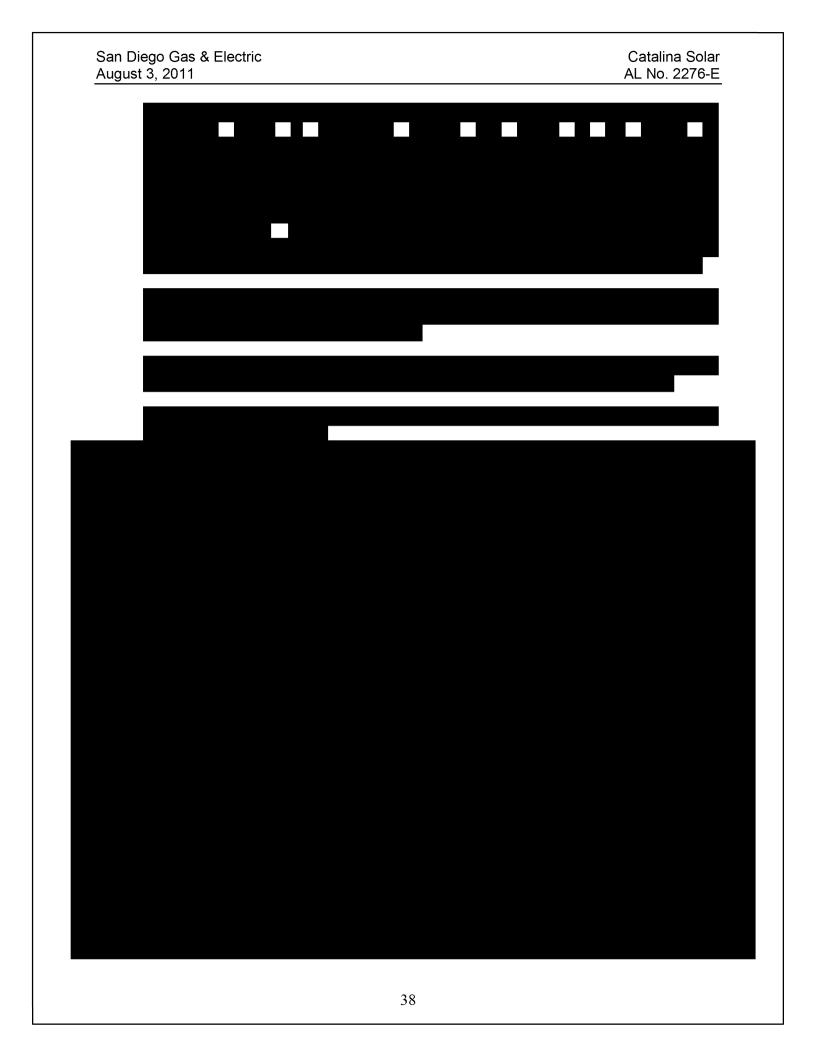


2. EQUIPMENT PROCUREMENT



3. PERMITTING STATUS





D. PTC/ITC

A discussion surrounding the Project's eligibility for tax credits is provided in Part 1 of this Advice Letter in Section III.C.4.

E. TRANSMISSION

1. HOW ELECTRICITY WILL BE DELIVERED UNDER THE CONTRACT IN TERMS OF COST, TIMING, AND LOCATION. ANY IMPROVEMENTS, TRANSACTIONS, AND OTHER CONTINGENCIES THAT MUST BE MET, TO ENABLE DELIVERY AS PLANNED



2. <u>CONFIDENTIAL INFORMATION ON GEN-TIE AND NETWORK UPGRADES AND COSTS THAT IS</u> NOT PROVIDED IN THE PUBLIC PORTION OF THE ADVICE LETTER,

See the transmission discussion immediately above.

⁶ Pacific Wind is also an enXco project.

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



4. TRANSMISSION DETAILS:

| TRANSMISSION DETAILS | | |
|---|--|--|
| QUEUE NUMBER (SPECIFY CONTROL AREA :CAISO,IID, ETC) AND RELATIVE POSITION | | |
| IF IN CAISOS ERIAL GROUP, STATUS OF: | | |
| Feasibility Study | | |
| System Impact Study | | |
| FACILITIES STUDY | | |
| IF IN CAISOC LUSTER: | | |
| Name of Cluster | | |
| Status of Phase I and II studies | | |
| INTERCONNECTION AGREEMENT – DATE SIGNED OR ANTICIPATED | | |
| PREFERRED POINT OF INTERCONNECTION (LINE, SUBSTATION, ETC.) | | |
| EARLY INTERCONNECTION DETAILS, IF APPLICABLE | | |

| GEN-TIE TYPE (NEW LINE, RECONDUCTOR, INCREASED TRANSFORMER BANK CAPACITY, INCREASED BUS CAPACITY, INCREASED SUB AREA) | |
|--|--|
| GEN-TIE LENGTH | |
| Gen-Tie Voltage | |
| Dependent Network Upgrade(s) | |
| EXPECTED NETWORK UPGRADE COMPLETION DATE | |

F. FINANCING PLAN



- 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.

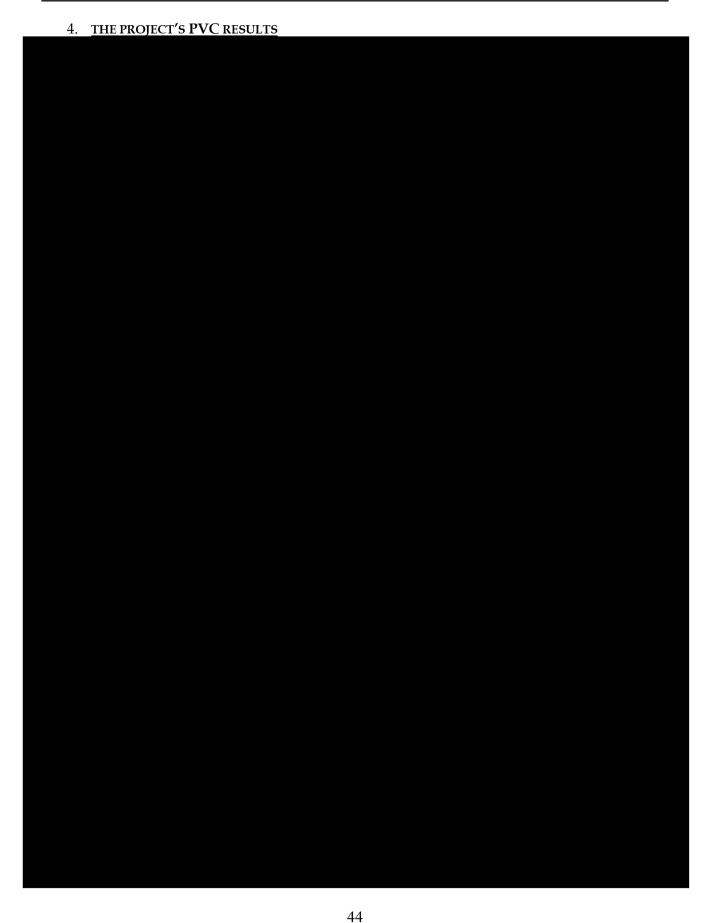
2. THE PROJECT'S PVC SCORE RELATIVE TO OTHER PROJECTS ON THE SHORTLIST AND IN THE SOLICITATION (E.G. RELATION TO MEAN AND MEDIAN, ANY PROJECTS NOT SHORTLISTED WITH HIGHER PVC SCORES, ETC.). USE FIGURES FROM BID WORKPAPERS, AS APPROPRIATE.



3. GENERATED GRAPHS FROM THE RPSW ORKPAPERS:







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Confidential Appendix B* 2009 Solicitation Overview

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ATTACH IS SDG&E'S 2009S OLICITATION OVERVIEW, SUBMITTED AS SECTION 3 OF SDG&E'S 2009LCBFR EPORT.



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Confidential Appendix C* Final RPS Project Specific Independent Evaluator Report

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ATTACHED IS THE FINAL, CONFIDENTIAL VERSION OF THE IE'S PROJECT-SPECIFIC REPORT



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Confidential Appendix D** *

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Contract Stmmary: Catalina Solar * * * *

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

CONTRACT SUMMARY

A. SITE

1. ADDRESS AND LATITUDE AND LONGITUDE OF THE PROJECT'S PROPOSED SITE (IN DECIMAL DEGREE AND DEGREES: MINUTES: SECONDS FORM (E.G.49.5000°,-123.5000° AND 49°30'02"N, 123°30'30"W))



2. GENERAL MAP OF THE PROJECT'S PROPOSED LOCATION.





B. THE PROJECT'S CONTRIBUTION TO SDG&E'S RPS PROCUREMENT TARGETS

Confidential Appendix G sets forth more details about the Project's contribution to SDG&E's APT and IPT goals on a percentage basis.

- C. TERMS AND CONDITIONS OF DELIVERY
 - 1. THE POINT OF DELIVERY FOR THE PROJECT'S ENERGY AND THE SCHEDULING COORDINATOR.

The CAISO point of delivery is at the 230 kV bus at the Whirlwind Substation.

2. INFORMATION REGARDING FIRMING AND SHAPING ARRANGEMENTS, OR OTHER PLANS
TO MANAGE DELIVERY OF THE ENERGY THAT IS NOT INCLUDED IN THE PUBLIC SECTION OF
THE ADVICE LETTER.

There are no firming and shaping arrangements or plans to manage energy delivery other than what is described in the public section of the Advice Letter.

D. MAJOR CONTRACT PROVISIONS

1. MAJOR CONTRACT PROVISIONS ARE SUMMARIZED IN THE MATRIX BELOW.

| TERM/CONDITION | RPSC ONTRACT | |
|---|---|--|
| TYPE OF PURCHASE (RENEWABLE, RENEWABLE/CONVENTIONAL HYBRID, ETC.) | As-available, bundled Renewable (solar) power | |
| UTILITY OWNERSHIP OPTION | | |
| CONDITIONS PRECEDENT AND DATE TRIGGERS | | |
| AVERAGE ACTUAL PRICE (\$/MWH) | | |

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







| Term/Condition | RPSC ONTRACT |
|---|--------------|
| No Fault Termination | |
| SELLER'S TERMINATION RIGHTS | |
| UTILITY'S TERMINATION RIGHTS | |
| RIGHT OF FIRST REFUSAL OR RIGHTS OF FIRST OFFER | |

2. CONTROVERSIAL AND/OR MAJOR PROVISIONS NOT EXPRESSLY IDENTIFIED IN THE MATRIX ABOVE.



Also see Section E-3 below.

3. OTHER CONTRACT PROVISIONS

a. ANY OTHER SIGNIFICANT OR UNIQUE CONTRACT PROVISIONS TOO DETAILED AND/OR COMPLICATED TO INCLUDE IN THE MATRIX ABOVE.

See Section D-2 above.

b. WHETHER THE DEVELOPER IS TAKING ON THE FULL RISK UNDER CURRENT CONTRACT TERMS AND PRICE (FOR BIOMASS CONTRACTS ONLY).

Not applicable

E. CONTRACT PRICE

1. THE LEVELIZED CONTRACT PRICE USING SDG&E'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:
- * INDEXED PRICING:
- * ESCALATION FACTORS:
- * Non-AMFs subsidies:
- * OTHER:

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



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.



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.



- 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'S 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'S \$/MWH PRICE.



- 8. INDIRECT EXPENSES [ARE/ARE NOT] BUILT INTO THE CONTRACT PRICE, PROVIDE:
 - a. A CALCULATION THAT SUBTRACTS THE INDIRECT EXPENSES FROM THE CONTRACT'S TOTAL ABOVE-MARKET COSTS, AND
 - b. A DESCRIPTION OF THE METHODOLOGY USED FOR THE CALCULATION.
- 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 | | |
| LEVELIZED TOD-ADJUSTED TOTAL CONTRACT COST (CONTRACT PRICE + FIRMING AND SHAPING) | | |
| LEVELIZED MPR | \$112.45 | Base MPR for 2013 start for 25 year contracts |
| LEVELIZED TOD-ADJUSTED MPR | | |
| ABOVE-MPRC OST (\$/MWH) | | |
| TOTAL SUM OF ABOVE-MPRP AYMENTS (\$) | | AND |

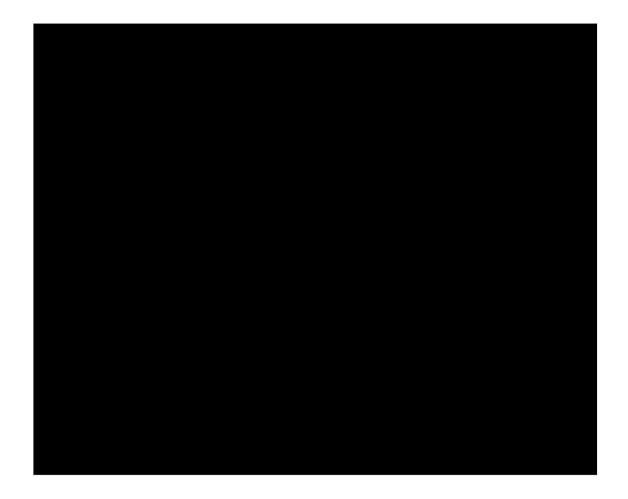
The file below contains the AMF Calculator for the Project. Because the energy deliveries are guaranteed to be the same between the 110 MW and 106 MW builds, the AMF amounts are identical between the two build out options



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).
- 12. GRAPHS FROM THE RPSW ORKPAPERS:

RPS SOLICITATION BID SUPPLY CURVE: 2009A LL BIDS VS. CURRENT SHORT LIST



13. HOW THE CONTRACT PRICE COMPARES WITH THE FOLLOWING:

a. OTHER BIDS IN THE SOLICITATION,



c. RECENTLY EXECUTED CONTRACTS

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

14. 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.

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Confidential Appendix E * *

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Comparison of Contract with * *
SDG&E's Pro Forma Power Purchase Agreement

* *

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THE FILE ATTACHED BELOW IS A REDLINE OF THE CONTRACT AGAINST SDG&E'S COMMISSION-APPROVED PRO FORMA RPS CONTRACT.



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Confidential Appendix F * *

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Power Pårchase Ağreement

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



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Confidential Appendix G** *

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Project's Contribution Toward RPS Goals * *

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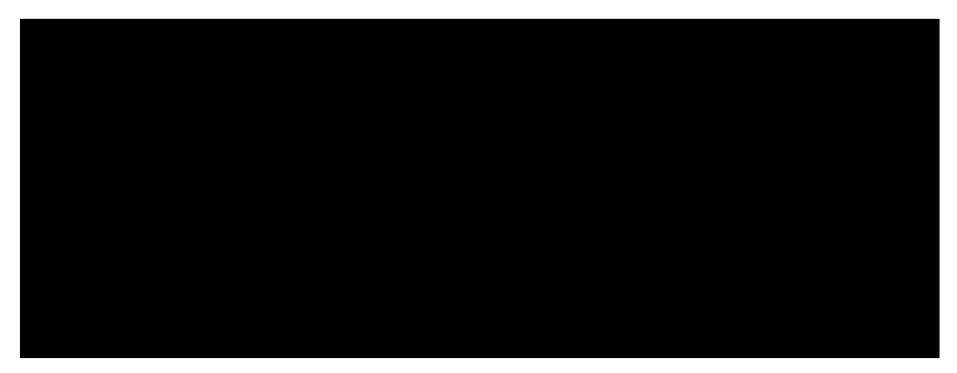
* *

* *

Project's*Contribution*to*RPS*Goals

* *

| Project*Name* * 7 | Гесhnology | COD | Location |
|-------------------|------------------|-----------|--------------------|
| Catalina*Sölar* * | Solar*P V | 6/30/2013 | Mojave,*Călifornia |

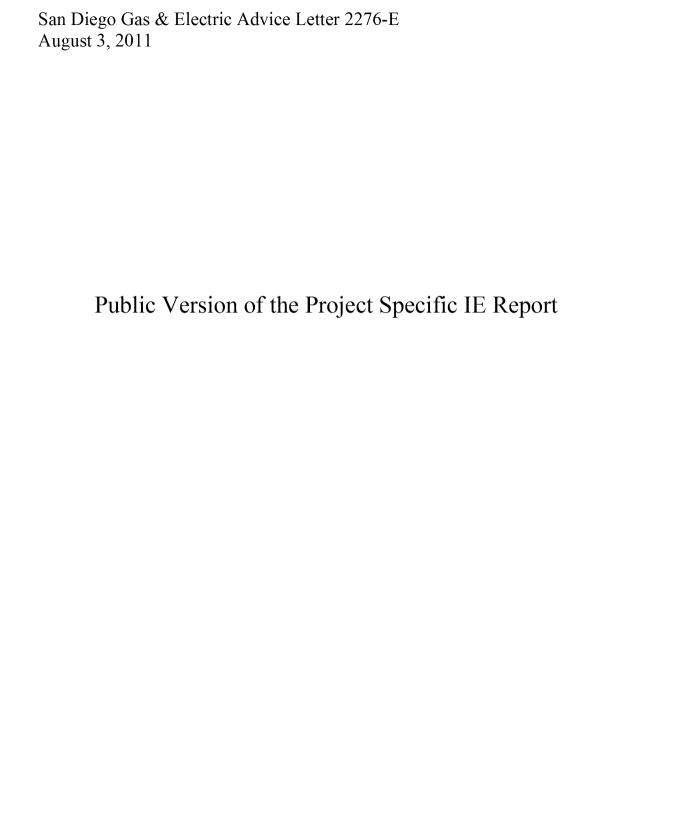


THE PROJECT WAS NOT PREVIOUSLY INCLUDED AS PART OF THE UTILITY'S BASELINE. THEREFORE, THE FOLLOWING TABLE IS NOT APPLICABLE AS SDG&E'S BASELINE WILL NOT CHANGE..

| | Deliveries (GWH/YR) | | | | | | | | | | |
|-------------------------------------|---------------------|------|------|------|------|------|------|------|------|------|------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Pre-2002/B ASELINE | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| DELIVERIES FROM PROPOSED PROJECT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UPDATED BASELINE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

THE PROJECT HAS NOT STARTED DELIVERIES YET. THEREFORE, THE FOLLOWING TABLE IS NOT APPLICABLE AS IT IS NOT AN EXPIRING CONTRACT.

| | DELIVERIES (GWH/YR) | | | | | | | | | | |
|---|---------------------|------|------|------|------|------|------|------|------|------|------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| EXPIRING CONTRACTS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EXPIRING DELIVERIES FROM PROPOSED PROJECT | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UPDATED EXPIRING CONTRACTS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



San Diego Gas & Electric Co.

Report of the Independent Evaluator on the 106 to 110 MW Catalina Solar contract relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO)

July 31, 2011

San Diego Gas & Electric Co.

Report of the Independent Evaluator on the 106 to 110 MW Catalina Solar contract relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO)

July 31, 2011

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Prepared by: Jonathan M. Jacobs

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Version: 1.2

San Diego Gas & Electric Co. 7/31/11

FOREWORD

This is PA Consulting Group's Independent Evaluator (IE) Report analyzing the contract between San Diego Gas & Electric Company (SDG&E) and Catalina Solar LLC for an approximately 110 MW photovoltaic project to be located in Kern County and interconnected at Southern California Edison's Whirlwind substation. This is a pure bilateral contract; the project was not bid into any of SDG&E's Renewables RFOs. The project has been developed by enXco Development Corp. (enXco).

The CPUC requires an IE report accompany any bilateral contract submitted for approval, and the template provided by the CPUC relates to RFOs. Since this contract was not submitted into any RFO, PA has based its report upon its IE report for the most recently completed (2009) RFO.

This report is based on PA Consulting Group's Preliminary Report on the 2009 RFO. The Preliminary Report addressed the conduct and evaluation of San Diego Gas & Electric Company's 2009 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 6 and 7. 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 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. INTRODUCTION

PA Consulting Group, Inc. (PA) has served as the Independent Evaluator (IE) of San Diego Gas & Electric Co.'s (SDG&E's) 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO). This Report provides PA's evaluation of the fairness of the solicitation, up to and including the identification of a "short list" of bidders with whom SDG&E may pursue contract negotiations. This document has been formatted in accord with a template provided by Cheryl Lee of the CPUC Energy Division in an email dated Oct. 27, 2009.



2. 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.

2.1 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. 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. 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

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

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



RPS solicitations).³ 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".⁴ The Decisions that approved the utility RPS solicitation plans for 2007 and 2008⁵ 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." 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.

D. 09-06-050, which was primarily concerned with the definition of a "fast-track" procedure for selecting and approving short-term renewable contracts, also clarified the procedure for approving bilateral contracts. It specifies that "long-term bilateral contracts should be reviewed according to the same processes and standards as contracts that come through a solicitation. This includes review by the utility's Procurement Review Group and its Independent Evaluator." This section of the decision does not specify that a bilateral contract should be reviewed in the context of an RFO, although the IE report template distributed by the Energy Division only apply to RFOs (Energy Division also distributed a template for a "short form" report related to the special approval procedure for short-term contracts).

Furthermore, D. 09-06-050 orders "the Director of Energy Division [to use] the market price referent calculated for the same solicitation year in which the contract is signed as a price reasonableness benchmark." That would imply the reasonableness of a contract should be judged against the contemporary market price referent (MPR), and similarly against the shortlist of the contemporary RFO. In this specific case PA has used the results of the 2009 RPS RFO.

2.2 PA'S ROLE AS INDEPENDENT EVALUATOR

Template language: "Description of key IE roles: IEs provide an independent evaluation of the IOU's RPS bid evaluation and selection process:

³ 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.

⁴ D. 06-05-039, p. 46.

⁵ 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.

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

^{6A} California Public Utilities Commission, Decision (D.) 09-06-050, June 19, 2009, p. 28f.

^{6B} D. 09-06-050, Ordering Paragraph 7, p. 42.

2. Role of the Independent Evaluator (IE)



- "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 Evaluator for SDG&E's 2006 Renewable RFO and the Local Peaker RFO (conducted in 2006-7). In each case, PA and SDG&E used the above interpretation of the IE role, and it was adopted for the 2009 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 way⁷.

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.

⁷ 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.



2.3 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 2009 RFO during and after the 2008 RPS RFO evaluation, including the possibility of PA conducting the LCBF evaluation. 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 treatments of duration equivalence and resource adequacy. 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).

PA was provided access to all the SDG&E staff involved in the evaluation of the Renewables RFO. In general, the bid evaluation criteria were similar to those that had been used in past RFOs. PA met with SDG&E to review the evaluation criteria and reviewed the LCBF model constructed by SDG&E.

PA was present at both bidder conferences: in San Diego on August 5 and in El Centro on August 12. PA was provided all questions submitted by bidders either at the bidder conference or later in writing, as well as SDG&E's answers. PA received the electronic bids from SDG&E in San Diego on both days bids were due.

PA was in regular contact with the SDG&E evaluation team. PA was provided all the data in the evaluation process. PA was responsible for interpreting all bids in order to conduct the LCBF evaluation. PA identified missing or incomplete information, including viability scorecards, and requested additional data from bidders. 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.

2.4 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.) 05-06-040.8 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.

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

2. Role of the Independent Evaluator (IE)



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.



3. ADEQUACY OF OUTREACH AND ROBUSTNESS OF THE SOLICITATION

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.

3.1 SOLICIATION MATERIALS

Template language: "Were the solicitation materials clear and concise to ensure that the information required by the utility to condut [sic] 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 as noted in the next paragraph. Even so, not all bidders entered data correctly and completely, but PA does not believe this was the fault of the forms.

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, the solicitation forms and posted responses did not always elicit the type of information required by the Project Viability Calculator. In particular, the PVC scoring criteria are based on specific information – e.g., identification of projects to support assertion of project development experience, or an explanation of why a particular interconnection milestone with IID is or is not equivalent to a CAISO milestone.

3.2 ADEQUACY OF OUTREACH

Template language: "Identify guidelines used to determine whether IOU did adequate outreach (e.g., sufficient publicity, emails to expected interested firms). Did IOU do adequate outreach? If not, explain how it was deficient."

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 686 email addresses, associated with 545 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.



3.3 SOLICITATION ROBUSTNESS

Template language: "Identify guidelines used to determine adequate robustness of solicitation (e.g., number of proposals submitted, number of MWhs associated with submitted proposals). Was solicitation adequately robust?"

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 with pricing options. The CPUC had 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.

3.4 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.

3.5 ADDITIONAL ISSUES

Template language: "Any other relevant information or observations"

PA has nothing else to add to this chapter.



4. FAIRNESS OF THE DESIGN OF 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.

4.1 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:⁹

- * 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).

⁹ 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.

4. Fairness of the design of 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.

4.2 SDG&E'S LCBF METHODOLOGY

Template language: "Describe IOU LCBF methodology."

SDG&E ranked bids using a spreadsheet. The following quantitative values went into the ranking:

- * Adjusted, levelized offer price
- * Estimated costs of transmission network upgrades or additions
- * Estimated congestion costs
- * Estimated RA credit

Debt equivalence was not considered, per CPUC D. 07-12-052. The next four subsections describe the four bullet items above. The fifth subsection addresses a specific change to one of the details of the LCBF calculation relative to previous renewable RFOs. PA's opinion of the use of LCBF methodology is included in section 5.8.

4.2.1 Adjusted, levelized offer price

SDG&E's bid evaluation method does not directly compare costs and benefits of individual contracts; rather it creates 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. This means that SDG&E does not compute an "avoided cost" or "market price" by hour or subperiod to be compared with contract costs. Such a computation would be appropriate if the source of contract value was energy value (avoided energy purchases). But RPS-qualified energy is not interchangeable or fungible with spot energy, because spot energy is not quaranteed to be RPS-qualified.

The benefit or value of RPS-qualified energy is in its renewability. In that sense every MWh from a renewable resource has equal benefit regardless of the contract or the time of delivery. But SDG&E also recognized that RPS-qualified energy has both "renewability value" and "energy value", and that the energy value depends on time of delivery (TOD). To recognize this, SDG&E uses as its measure of contract cost the average of the projected contract payments in different TOD periods weighted by the product of volume and a TOD weighting factor. The weighting factors have been approved by the CPUC and PA did not investigate their source.

For each year, the adjusted or "benefit-weighted" price is the average payment, divided by a MWh-weighted average TOD factor. For contracts with TOD pricing (where in each period

4. Fairness of the design of SDG&E's methodology for bid evaluation and selection



the payment per MWh equals the contract price times the TOD factor) it is the same as the contract price. The offer price term is the levelization of the adjusted price: for each year, the adjusted price in \$/MWh is multiplied by projected deliveries in MWh to get a stream of revenues, and the offer price term is the constant price in \$/MWh that would yield a stream of energy revenues having the same net present value.

4.2.2 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. (Two projects had CAISO-approved, completed System Impact Studies that could have been used but since they were ranked below the shortlist cutoff before adding any transmission costs, this specialized effort was not undertaken.) 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 own judgment to determine the cluster based on the project location and interconnection 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.

4.2.3 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. In past RFOs the congestion study had been conducted by ABB Inc. ABB was unable to do so for the 2009 study. PA agreed that it was reasonable for SDG&E's transmission planning group to conduct the study given the separation from the procurement group provided for under the FERC Code of Conduct. As for the 2008 RFO, there was no pre-Sunrise case. Congestion adders for the projects that ranked highest based on the other LCBF components were all small and therefore congestion costs did not affect the composition of the short list.

4.2.4 RA credit

Renewable projects under contract to SDG&E would provide varying amounts of resource adequacy (RA) credit. In the 2008 RPS RFO for which PA served as IE, SDG&E had represented RA as a cost rather than a credit, based on the cost SDG&E would incur for additional RA credits equal to the difference between a bid's capacity and its own RA credit. PA argued that this approach unduly relied on a bid's "nameplate" capacity, which had no real relation to any commodity the bid provided to SDG&E and which could in some cases be an artificial value. SDG&E accepted PA's argument for the 2009 RFO and assigned each bid a cost credit equal to the value of the RA credit the bid would be expected to receive based on technology and the RA capacity credits that have been assigned by CAISO to projects of similar technology (normalized by capacity). The result is an annual RA credit in \$/year (a unit cost in \$/kW-yr multiplied by capacity in kW). The credit is converted to levelized \$/MWh, similar to the levelization of the offer price term.



4.2.5 Duration equalization

In past Renewables RFOs, SDG&E used a "duration equalization" approach to handle start and end effects. This has addressed principle 6 from the Template (section 4.1). 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 an MPR proxy, that is, 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.

4.3 EVALUATION OF THE STRENGTHS AND WEAKNESSES OF SDG&E'S LCBF METHODOLOGY IN THIS SOLICITATION

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

- "1. Market valuation
- "2. Evaluation of various technologies and products
- "3. Evaluation of portfolio fit
- "4. Evaluation of bids with varying sizes, in-service dates, and contract length
- "5. Evaluation of bids' transmission costs
- "6. Evaluation of bids' project viability
- "7. Other."

Overall, PA believes that the SDG&E methodology is reasonable. This judgment is within the context of the principles set forth in 4.1, especially the last: "The methodology does not have to be the one that the IE would independently have selected but it needs to be 'reasonable'." PA has detailed comments on a limited number of the points above.

4.3.1 Evaluation of various technologies and products







4.3.2 Evaluation of portfolio fit

The Renewable Portfolio Standard is based on raw renewable MWh, with no time differentiation. Furthermore, the quantitative LCBF analysis is but part of a process that includes consideration of bidders' track records and viability and extensive negotiation — another IE has characterized the process as more like a "competitive negotiation" rather than a sealed-bid auction. DG&E's LCBF computation bears a similar relation to a more complex time-differentiated analysis as a "screening curve" analysis does to an optimal capacity expansion model; yet as a part of a larger process the screening curve analysis is often quite adequate.

4.3.3 Evaluation of bids' transmission costs

PA assigned TRCR clusters to those projects that did not provide such information. PA did not consider SCE's TRCR to contain a sufficient definition of its clusters, and requested additional information, which was received from an SCE attorney. In mid-August, PA was informed that SDG&E's procurement group was considering requesting from its transmission planning group a special TRCR-like upgrade analysis for Imperial Valley resources, but if such a study was conducted its results were not used in the LCBF evaluation. SDG&E's Evaluation Team requested a congestion analysis from SDG&E's Transmission function; PA reviewed the information provided by the Evaluation Team and ensured that no data was transmitted that could identify bidders.

4.3.4 Evaluation of bids' project viability

SDG&E eliminated certain bids due to low viability. These judgments did not always accord with bidders' Project Viability Calculators, which had been self-scored. It was necessary to rescore all high-ranking bids.

4.4 FUTURE IMPROVEMENTS

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

PA has no improvements to recommend at this time.

¹⁰ Private conversation.





4.5 ADDITIONAL COMMENT ON THE METHODOLOGY

Template language: "Any additional information or observations regarding the IOU's evaluation methodology."

PA has nothing else to add to this chapter.



5. PROCEDURAL FAIRNESS OF THE BID EVALUATION

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

This chapter addresses the application or administration of the methodology described in chapter 4

5.1 PRINCIPLES USED TO DETERMINE FAIRNESS OF PROCESS

Template language: "A. 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:¹¹

- * 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 20% 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?

¹¹ Jacobs, op. cit., p. 3-1.



5.2 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 2.3. Most of the guidelines above are addressed in detail in subsequent sections of this chapter, but three of them, which are not addressed below, can be answered here succinctly:

- * 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.

5.3 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?"

PA verified that each offer received conformed with the requirements of the RFO. Nonconforming bids were identified as such but not immediately discarded. As in previous renewables solicitation, the RFO stated that non-conformance "may disqualify [a] proposal from further consideration". SDG&E and PA interpreted this somewhat broadly and attempted to evaluate the nonconforming bids if possible. Extensive efforts were made to contact bidders and give them opportunities to provide additional information that would bring their bids into conformance. PA recommended that SDG&E eliminate a small number of offers as non-conforming:





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

5.4 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 PA. Certain key parameters were supplied by SDG&E independent of any bids, including the RA price estimate, RA cost factors, the proxy price for duration equalization, TOU pricing factors, and financial parameters of the revenue requirements model for Alternative III bids. Parameters and inputs for the congestion analysis were determined by SDG&E's transmission function independent of the procurement group.

5.5 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 analyzing using a spreadsheet model and parameters supplied by SDG&E. SDG&E and PA were in communication throughout the analysis, generally about modifications to the model that became necessary in the course of the analysis and about missing data. SDG&E did not exercise control over the quality or specifics of the analysis. SDG&E and PA did work together to identify and solicit missing information from bidders.

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. SDG&E's procurement group communicated to the transmission function the locations and general characteristics of a set of high-ranking bids for this analysis. PA reviewed that communication to ensure it included no identifying information.

5.6 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, SDG&E's model calculated costs for transmission network upgrades or additions, using the information provided through the TRCRs or a CAISO-approved, completed System Impact Study. 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.



5.7 ADDITIONAL ISSUES

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

5.7.1 Affiliate bids and UOG ownership proposals

The treatment of affiliate bids has been a focus of PA throughout its tenure as Independent Evaluator for SDG&E. Although the Energy Division's template does not specifically call for discussion of the handling of affiliate bids and UOG ownership proposals, the CPUC and FERC have both expressed concern about the fair treatment of non-affiliate bids. They required particular attention in past RFOs because SDG&E was conducting the evaluation itself, rather than having the IE do so. In this case, since PA conducted the evaluation, no special "masking" was required as in past RFOs.

SDG&E provided three alternative forms for bids: PPA, PPA with buyout option, and turnkey. The latter two are utility ownership forms. Several bidders submitted Alternative II (PPA with buyout) bids. In all cases these were additional options to Alternative I bids but the buyouts did not provide identifiable value. Several bidders submitted Alternative III (turnkey) bids, which were evaluated using a variant of a "revenue requirements" model and treating the revenue requirement to finance the purchase similarly to an annual PPA payment.

5.7.2 Viability

Developer and project viability have become a key concern in the Renewable RFO, because of the delays and contract failures that have affected several projects. The CPUC devoted special attention to viability in 2009, requiring "that each IOU include a project viability methodology and calculator in its amended 2009 Procurement Plan and solicitation package." 12

SDG&E requested bidders to complete a Project Viability Calculator (PVC) for each bid, rather than fill out the PVC for each bid. The PVC form was based on the format developed by the Energy Division. This was in order to avoid having the utility or IE create a PVC for every bid, since SDG&E did not know in advance how many bids would be received. In the event, separate project proposals were received

SDG&E's intent was that after the quantitative evaluation it would eliminate bids that, while scoring high, did not appear viable. One basis for doing so could have been the bidder-supplied PVCs; however, SDG&E and PA both expected bidders to take an optimistic view of viability and had therefore decided to rescore the PVCs from those bidders who scored highest in the LCBF ranking, beginning from the bidders' own scoring. SDG&E and PA separately rescored sets of high-ranking bids.

The original and revised scores are shown in Figure 1 in section 5.8.

¹² D. 09-06-018, p. 21.



5.7.3 Concentration risk



5.8 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?"

One of the most important aspects of the Renewables RFO is the need determination. Under the Renewable Portfolio Standard, utilities seek to obtain at least 20% of their 2010 retail deliveries from renewable sources. SDG&E has further committed to obtain 33% of its 2020 retail deliveries from renewable sources. The primary goal of RPS procurement is total renewable volume. For an individual Renewable RFO, this translates to a "need" target.

In the past, SDG&E has determined its renewable need based on a target of 24-26% of its 2010 deliveries "to provide a margin of safety in the event contracted resources do not achieve commercial operation by 2010." In 2009, SDG&E set a target at that fraction (24-26%) in "2011-2013" since the 2009 RFO could not yield capacity in 2010. SDG&E computed the energy expected to be produced in 2012 by all contracts already signed, plus the "discounted" energy from contracts currently in negotiation, to be in excess of 26% of load. Therefore SDG&E reasoned it had no need except if it had underestimated contract failure probabilities.

SDG&E took a "largest hazard" approach, and analyzed the largest hazard in two ways: (a) the largest individual expected delivery volume; (b) the total expected delivery from contracts

¹³ Ibid., p. 11.

5. Procedural fairness of the bid evaluation



and since SDG&E has committed to replace SPL-region contracts with other SPL-region contracts, SDG&E said it would shortlist bids in the SPL region. PA concurs that all these decisions are reasonable.







5.9 ADDITIONAL ISSUES

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

PA has nothing else to add to this chapter.

6. FAIRNESS OF PROJECT-SPECIFIC NEGOTIATIONS

Since January 2010, SDG&E has provided its Independent Evaluators with a weekly "status matrix" describing ongoing negotiations. The Catalina Solar project first appeared in the April 1, 2011, edition of the Status Matrix.

Review Group on April 15. PA followed the contract negotiations mostly through the successive weekly status matrices.

6.1 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.

6.2 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). PA usually tries to participate in at least one meeting between the parties, to gain some familiarity with the participants and explain the IE role

It is PA's opinion that this contract reflects fair negotiations.

6.3 TERMS AND CONDITIONS

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





6.4 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 enXco with information of the type addressed here.

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6. Fairness of project-specific negotiations



6.5 ADDITIONAL ISSUES

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

PA has nothing else to add to this chapter.

7. PROJECT-SPECIFIC RECOMMENDATION

PA agrees with SDG&E that the Catalina Solar contract merits approval.

7.1 EVALUATION

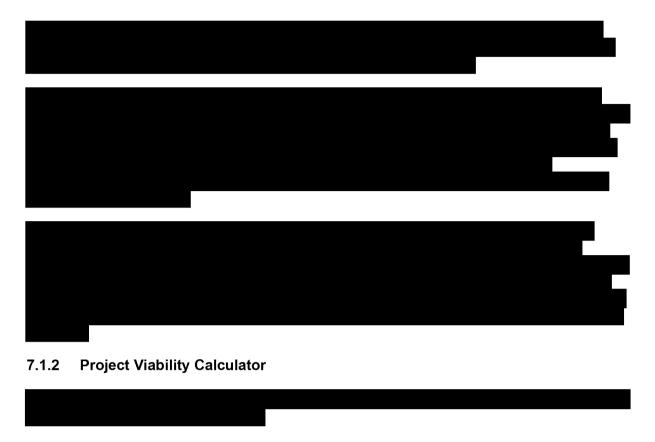
Template language: "A. Provide narrative for each category and describe the project's ranking relative to: 1) other bids from the solicitation and 2) from an overall market perspective:

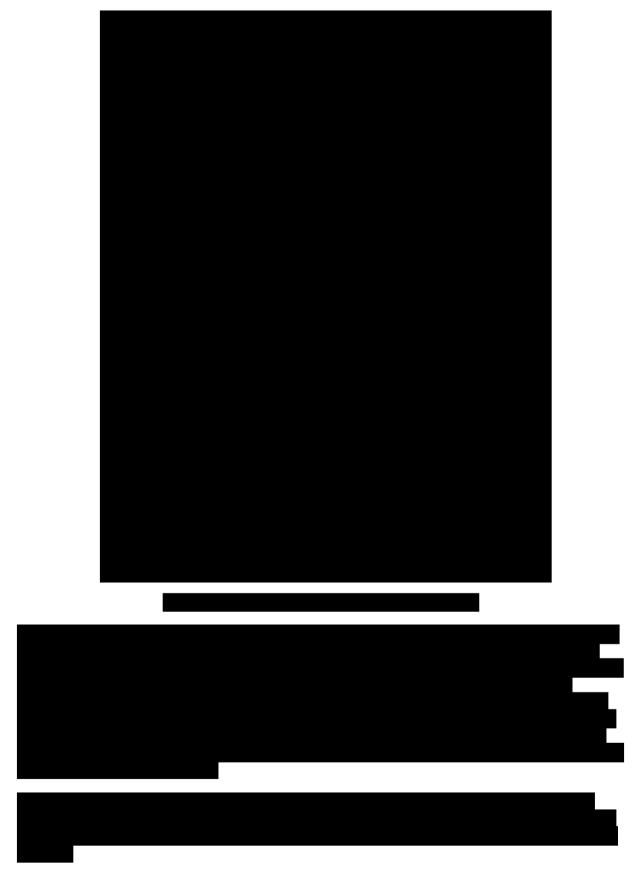
- 1. Contract Price, including transmission cost adders
- 2. Portfolio Fit
- 3. Project Viability
- a. Project Viability Calculator score
- b. IOU-specific project viability measures
- c. Other (credit and collateral, developer's project development portfolio, other site-related matters, etc.)
- 4. Any other relevant factors."

7.1.1 Pricing









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7.2 RECOMMENDATION

Template language: "Do you agree with the IOU that the contract merits CPUC approval? Explain the merits of the contract based on bid evaluation, contract negotiations, final price, and viability."

PA agrees with SDG&E that the Catalina Solar contract merits approval.

7.3 ADDITIONAL ISSUES

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

PA has nothing else to add to this chapter.