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

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

November 27, 2013

ADVICE LETTER 2552-E
(U 902-E)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: REQUEST FOR APPROVAL OF AMENDED RENEWABLE POWER PURCHASE AGREEMENTS WITH TIERRA DEL SOL SOLAR FARM LLC, LANWEST SOLAR FARM LLC, LANEAST SOLAR FARM LLC AND RUGGED SOLAR LLC

I. INTRODUCTION

A. Identify the purpose of the advice letter

San Diego Gas & Electric Company ("SDG&E") hereby files this Advice Letter requesting Commission approval of the Third Amendment to each of four power purchase agreements (the "PPAs") with Tierra del Sol Solar Farm LLC, LanWest Solar Farm LLC, LanEast Solar Farm LLC and Rugged Solar LLC (the "Projects"). Each of the Projects has a currently effective PPA with SDG&E. The four PPAs, as amended by their respective First Amendments, were approved by the Commission in Resolution E-4439 (November 10, 2011)[1] and have been under development in the meantime. The Second Amendment to the PPAs was executed concurrently with the Third Amendments submitted herewith, and is provided to the Commission as Confidential Appendix G in Part 2 of this Advice Letter. The Second Amendment provides for the Projects to use solar concentrating photovoltaic ("CPV") panels manufactured by in San Diego County and provides remedies to the Seller to help avoid a default under the Proposed Agreements if the panel supplier is unable to fulfill its commitments to provide panels to the Projects because of default, bankruptcy or unforeseen circumstances affecting the facility's output, including extensions of the Guaranteed Commercial Operation Dates (within the time limits already provided for in the PPAs) and reductions of the contract capacity. The PPAs as amended by their respective First Amendments, Second Amendments, and Third Amendments are hereinafter referred to as the "Proposed Agreements."

Each of the Proposed Agreements permits the seller thereunder to relocate the applicable Project from its current site in eastern San Diego County to a new site in the Imperial Valley, and if the seller so elects to relocate a Project, the Third Amendment modifies its PPA as follows: (1) modifies the guaranteed commercial operation date "(GCOD") for the facility; (2) modifies the remaining project development milestones consistent with the change of GCOD; (3) changes the site of the Projects from current sites in eastern San Diego County to a new site in the Imperial Valley; (4) changes the point of interconnection and delivery point from SDG&E's Boulevard Substation to the Imperial Valley Substation; (5) requires that the current interconnection agreement for the new site be amended to accommodate the relocation of the

[1] A fifth PPA between SDG&E and Desert Green Solar Farm LLC was approved by the Commission in the same Resolution and remains in active development. The Desert Green PPA is not a part of these amendments or of this Advice Letter filing but was amended by Amendment No. 2 as described herein.

Project; (6) imposes reductions on the contract pricing for any hourly, annual and biennial generation in excess of defined limits, and (7) increases the capacity factor of the Projects from 29% to either 32.4% (LanEast and LanWest) or 33% (Tierra del Sol and Rugged Solar). The relocation of the Projects to Imperial Valley is dependent upon the successful transfer of the Projects to a new project company (that may be owned by Soitec Inc. or a third party developer) and modification of the existing Large Generator Interconnection Agreement ("LGIA") for the new site to accommodate the interconnection of the four Projects.

Approval of the Proposed Agreements will increase the viability of the projects by relocating them to an existing site that, according to the developer, already has all major permits, enabling project interconnection via an existing interconnection agreement that has its network upgrades already constructed, and by providing for the use of locally manufactured CPV panels. This will support continued local employment at the existing manufacturing facility located in San Diego. Finally, approval of the Amendment will allow for the sale of the Projects to a third party developer with the ability to bring the Projects to fruition. Ratepayers will be protected from excessive contract costs by the contract provisions that reduce payments in the event of excessive generation.

B. Identify the subject of the advice letter, including:

1. Project name

   Tierra del Sol Solar Farm LLC, LanWest Solar Farm LLC, LanEast Solar Farm LLC and Rugged Solar LLC.

2. Technology (including level of maturity)

   Concentrating photovoltaic, an emerging technology that is gaining in terms of the number of megawatts deployed worldwide. Currently, there are approximately 14 MWp of Soitec's CPV in commercial operation, with an additional 50 MWp under construction and approximately 280 MWp in development, including the four Proposed Agreements. Rugged Solar, with a projected COD of December 31, 2015, will be the largest Soitec facility to achieve COD at that time, if it is completed on schedule. The projects under development utilizing Soitec technology include the CSolar IV West project being developed by Tenaska Solar Ventures, also in the Imperial Valley.[2] That project is expected to utilize 67 MWac of Soitec panels.

3. General Location and Interconnection Point

   The four projects are located in the Imperial Valley region of southern California near the city of Calexico, California. Each of the four Projects will interconnect at the Imperial Valley Substation.

4. Owner(s) / Developer(s)

   a. Name(s)

   The project owners are Tierra del Sol Solar Farm LLC, LanWest Solar Farm LLC, LanEast Solar Farm LLC and Rugged Solar LLC, all of which are entities owned and controlled by Soitec, Inc. of France.

[2] The Amended and Restated Second Amendment to the CSolar IV West PPA is currently pending before the Commission in Supplemental Advice Letter filing 2487-E-A (filed November 8, 2013).

b. Type of entity(ies) (e.g. LLC, partnership)

The PPA counterparties are California limited liability companies.

c. Business Relationship (if applicable, between seller/owner/developer)

Each of the sellers is a wholly-owned subsidiary of Soitec.

5. Project background, e.g., expiring QF contract, phased project, previous power purchase agreement, contract amendment

Each of the Proposed Agreements is an amendment to existing, and approved agreement.

6. Source of agreement, i.e., RPS solicitation year or bilateral negotiation

7. If an amendment, describe contract terms being amended and reason for amendment

C. General Project(s) Description

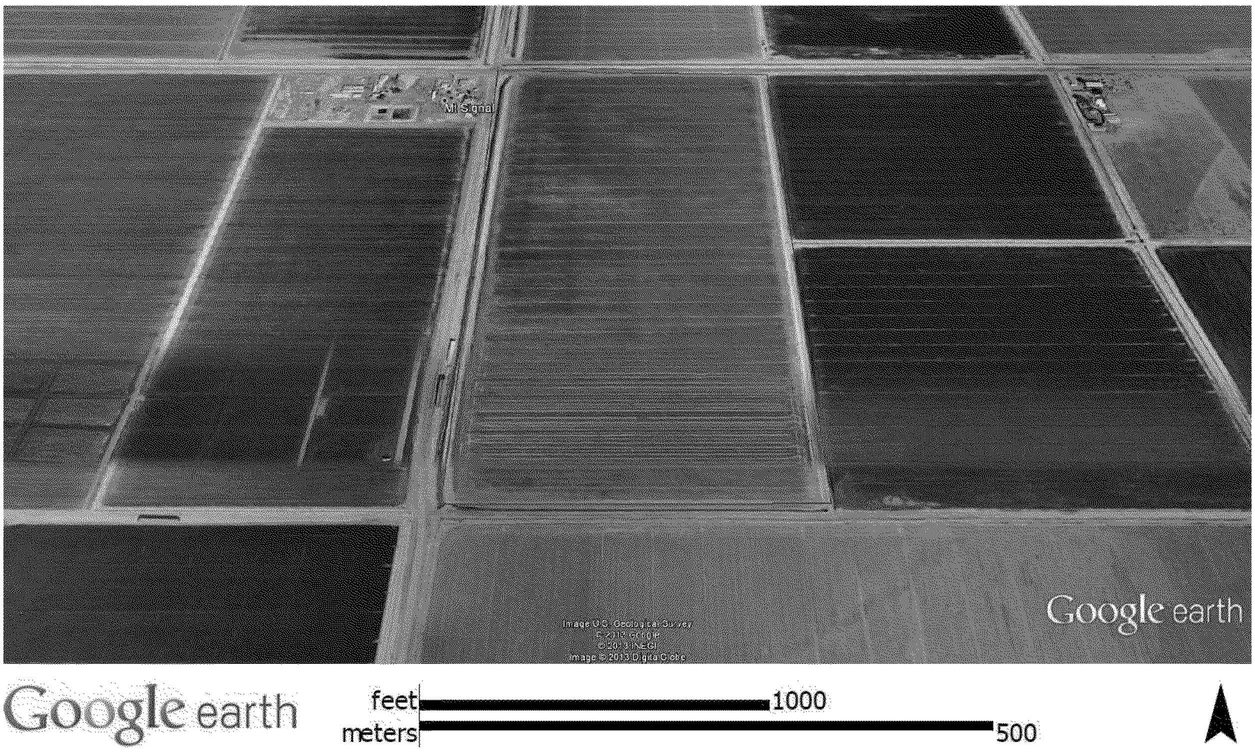
Project Name	1. Tierra del Sol Solar Farm LLC
	2. LanWest Solar Farm LLC
	3. LanEast Solar Farm LLC
	4. Rugged Solar LLC
Technology	Solar concentrating photovoltaic
Capacity (MW)	1. 35-45 MWac
	2. 3.5-6.5 MWac
	3. 12-22 MWac
	4. 60-80 MWac
Capacity Factor	32.7%
Expected Generation (GWh/Year)	1. 123.86 average over term
	2. 16.47 average over term
	3. 59.29 average over term
	4. 207.55 average over term
Initial Commercial Operational Date	Upon at least 1 MW of capacity reaching commercial operation
Date contract Delivery Term begins	The day the project declares commercial operation for at least 1 MW

Delivery Term (Years)	25 years after the commercial operation date for the entire facility
Vintage (New / Existing / Repower)	New
Location (city and state)	Near Calexico, California
Control Area (e.g., CAISO, BPA)	CAISO
Nearest Competitive Renewable Energy Zone (CREZ) as identified by the Renewable Energy Transmission Initiative (RETI)[3]	Imperial Valley South CREZ 30
Type of cooling, if applicable	N/A

a. <u>Project location</u>

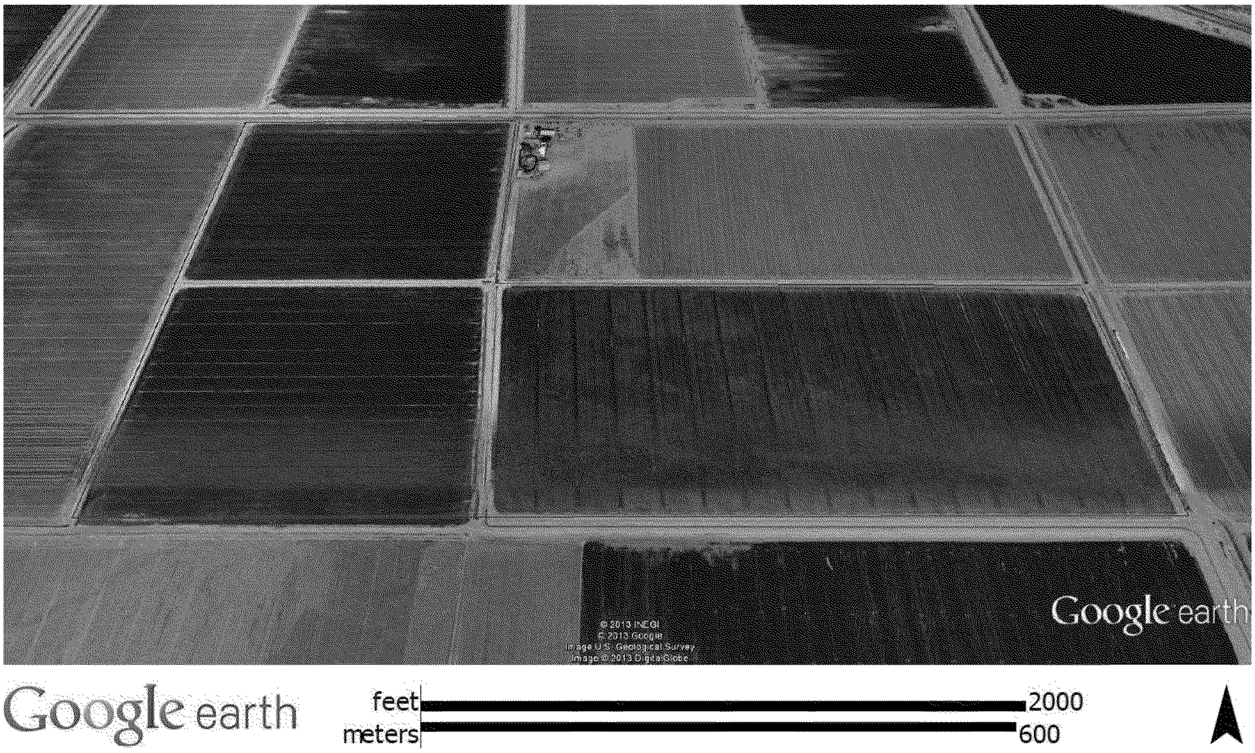
1. Provide a general map of the generation facility's location.

LanWest

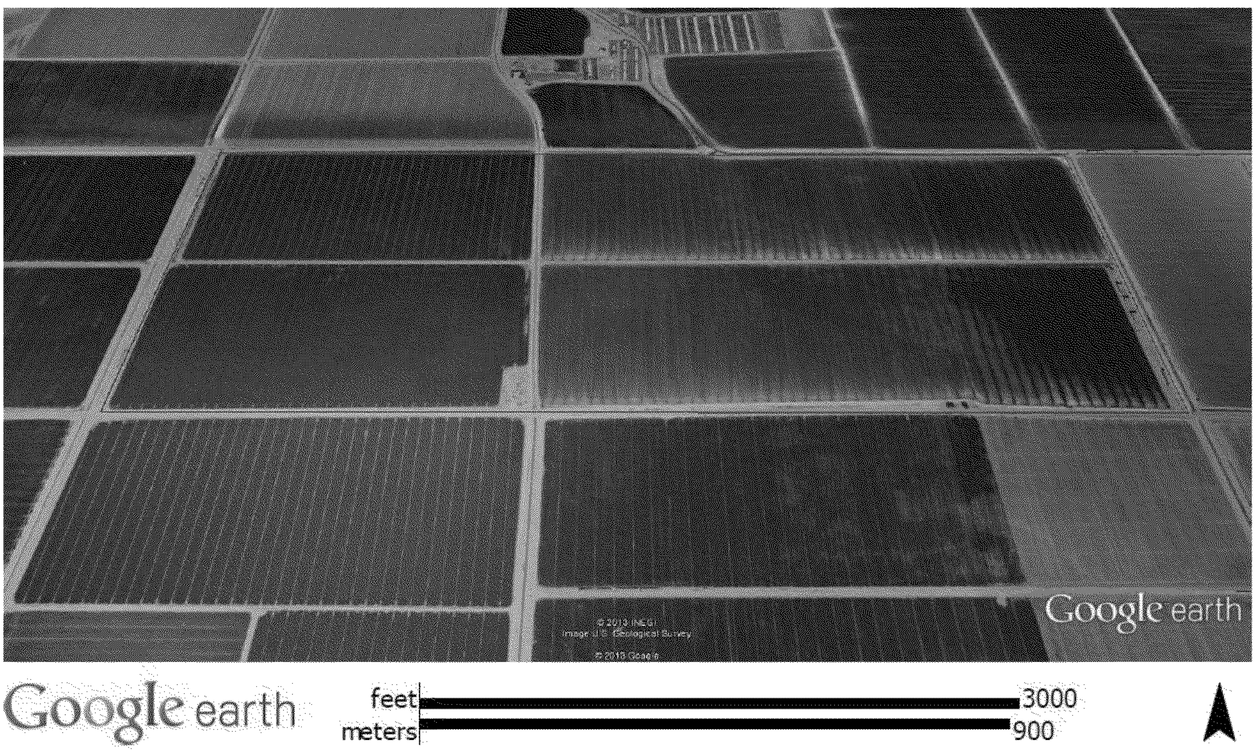


[3] Information about RETI is available at: http://www.energy.ca.gov/reti/

LanEast

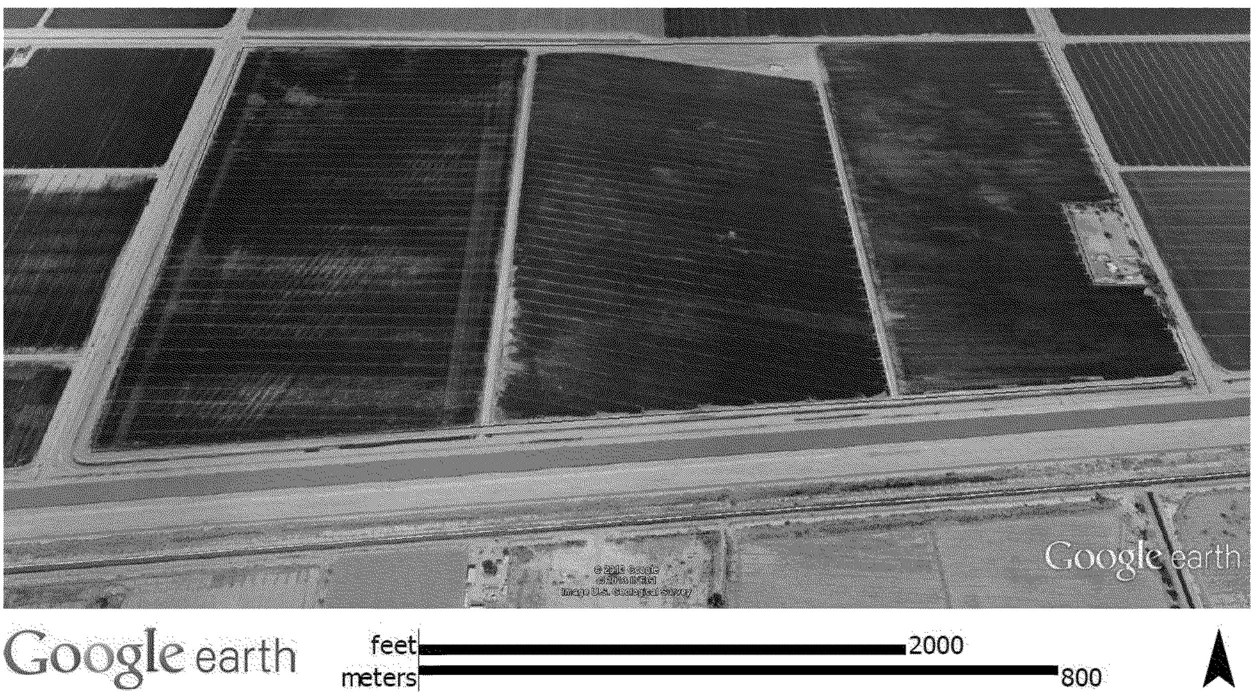


Tierra del Sol



Rugged (Western Portion)

Rugged (Southern Portion)



SB_GT&S_0391818

2. For new projects describe facility's current land use type (private, agricultural, county, state lands (agency), federal lands (agency), etc.).

   Each of the sites is currently designated as agricultural land but, according to the developer, has been permitted for the proposed Project.

b. General Deal Structure

Describe general characteristics of contract, for example:

1. Required or expected Portfolio Content Category of the proposed contract

   SDG&E intends to claim the generation from each of the facilities as Portfolio Content Category 1, since the projects are each located within the state of California and have their first point of interconnection with the CAISO, a California Balancing Authority.

2. Partial/full generation output of facility

   SDG&E will purchase the entire as-available output from the facilities, net of station service.

3. Any additional products, e.g. capacity

   Besides as-available energy, SDG&E will be entitled to any and all Capacity Attributes, Green Attributes, and other ancillary products, services or attributes similar to the foregoing that are attributable to the Energy generated by the Project, in each case on an As-Available basis.

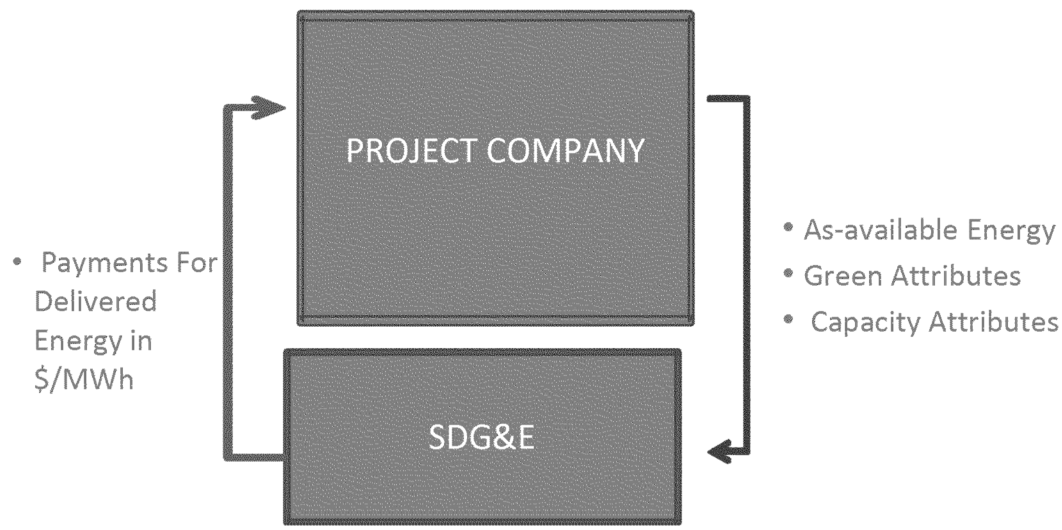
4. Generation delivery point (e.g. busbar, hub, etc.)

   The point of interconnection with the CAISO-controlled grid. Currently, the proposed delivery point will be the CAISO controlled-grid at the Imperial Valley Substation.

5. Energy management (e.g. firm/shape, scheduling, selling, etc.)

   SDG&E will be the Scheduling Coordinator for the project and responsible for scheduling energy to the CAISO. No firming or shaping is required.

6. Diagram and explanation of delivery structure



c. <u>RPS Statutory Goals & Requirements</u>

1. Briefly describe the Project's consistency with and contribution towards the RPS program's statutory goals set forth in Public Utilities Code §399.11. These goals include displacing fossil fuel consumption within the state; adding new electrical generating facilities within WECC; reducing air pollution in the state; meeting the state's climate change goals by reducing emissions of greenhouse gases associated with electrical generation; promoting stable retail rates for electric service; a diversified and balanced energy generation portfolio; meeting the state's resource adequacy requirements; safe and reliable operation of the electrical grid; and implementing the state's transmission and land use planning activities.

   The PPAs, as amended, will displace up to ~150 MW of fossil fuel generation in each operating hour, and comply with State policies regarding greenhouse gases because they do not produce any greenhouse gas or other emissions. The PPA's fixed rates for each MWh of energy produced help promote stability for electricity prices and rates. By utilizing CPV technology, the projects will contribute to the diversity of SDG&E's electric generation portfolio, which currently has only one other proposed project that utilizes CPV, and will help SDG&E achieve and maintain the required RPS targets for the second and third compliance periods and beyond.

   The projects will also provide capacity to SDG&E to count toward SDG&E's resource adequacy requirements. The PPAs will deliver its energy to SDG&E utilizing the capacity on the Sunrise Powerlink, making effective use of existing transmission infrastructure, and network upgrades at the site have already been constructed, thereby helping to lower transmission costs and keep rates stable. According to the developer, the new project site received its amended Conditional Use Permit from Imperial County in July 2013, demonstrating compatibility with local land use priorities.

2. Describe how procurement pursuant to the contract will meet IOU's specific RPS compliance period needs. Include Renewable Net Short calculation as part of response.

   The output from the Projects is included in SDG&E's forecast of retail sales and renewable generation, upon which its RPS compliance strategy is based. Moving the Projects to the Imperial Valley allows opportunity for them to achieve COD sooner than the current schedule due to delays in the construction of the interconnection facilities. The developer has represented that the new site in Imperial Valley already has all major permits and has an existing interconnection agreement that will not require network upgrades. All of these factors contribute to the Projects' viability. Although SDG&E is not currently projecting a net short on RPS energy until after the close of Compliance Period 3, that projection of no

SB_GT&S_0391820

need is based, in part, on having these Projects online and producing during Compliance Periods 2 and 3.

d. Confidentiality

Explain if confidential treatment of specific material is requested. Describe the information and reason(s) for confidential treatment consistent with the showing required by D.06-06-066, as modified by D.08-04-023.

Confidential treatment is requested for the Confidential Appendices that make up Part 2 of this Supplemental Advice Letter. The request for confidential treatment is based on the Confidentiality Matrix from Commission Decision No. 06-06-066 *et seq*., as described below:

Confidential Appendix A – Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.; Contract Terms and Conditions, Category VII.G.; Total Energy Forecast, Category V.C.

Confidential Appendix B - Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.

Confidential Appendix C - Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.; Contract Terms and Conditions, Category VII.G.; Total Energy Forecast, Category V.C.

Confidential Appendix D - Contract Terms and Conditions, Category VII.G; Specific Quantitative Analysis, Category VIII.B.

Confidential Appendix E - Contract Terms and Conditions, Category VII.G.

Confidential Appendix F - Contract Terms and Conditions, Category VII.G.

Confidential Appendix G - Contract Terms and Conditions, Category VII.G.

The attached Declaration of Theodore E. Roberts sets forth added detail on the justification of this request for confidential treatment.

II. CONSISTENCY WITH COMMISSION DECISIONS

A. RPS Procurement Plan

1. Identify the Commission decision that approved the utility's RPS Procurement Plan. Did the utility adhere to Commission guidelines for filing and revisions?

SDG&E filed its 2012 RPS Procurement Plan (the "2012 Plan") on November 29, 2012.[4] The Commission had approved SDG&E's 2012 Plan in D.12-11-016 and directed SDG&E to modify the plan. The conformed plan was filed on November 29, 2012 and amended on December 13, 2012.

SDG&E's approved 2012 Plan provides that SDG&E will seek to procure resources to:

[4] Discussions that led to the negotiation and execution of the Proposed Agreement began earlier in 2012, when SDG&E was procuring under its 2011 RPS Procurement Plan.

- Assure that it has enough RPS energy to meet the RPS program requirements;
- Look for opportunities to maximize ratepayer value through banking, sales and short term purchases; and
- Diversity its RPS portfolio in order to mitigate risks.

2. Describe the Procurement Plan's assessment of portfolio needs.

   SDG&E's portfolio need is calculated based on a probability-weighted projection of generation from projects in the existing portfolio compared to the forecasted demand and the required RPS percentage.

3. Discuss how the Project is consistent with the utility's Procurement Plan and meets utility procurement and portfolio needs (e.g. capacity, electrical energy, resource adequacy, or any other product resulting from the project).

   As discussed above, these existing, approved Projects are consistent with SDG&E's procurement and portfolio needs because they are already being counted in SDG&E's RPS portfolio for the term of their delivery. Approval of this Advice Letter would mean that the Projects remain in the portfolio and no adjustments need to be made due to their absence.

4. Describe the preferred project characteristics set forth in the solicitation, including the required deliverability characteristics, online dates, locational preferences, etc. and how the Project meets those requirements.

   The 2012 RPS RFO was specifically seeking projects with the following qualifications: (1) Long-term energy only or fully deliverable products (term of 20 years or less and CODs in December 2016 at the earliest, with preference for 2018 and 2019 CODs), (2) Long-term energy only or fully deliverable products (term of 20 years or less, with 2018 or 2019 CODs), or (3) Unbundled RECs that will be generated in December of 2013 with preference for those generated in 2015 and later.

   The Projects do not meet these requirements, but were existing, Commission-approved PPAs at the time the 2012 RPS RFO was issued.

5. Sales

   a. For Sales contracts, provide a quantitative analysis that evaluates selling the proposed contracted amount vs. banking the RECs towards future RPS compliance requirements (or any reasonable other options).

   N/A – not a sales contract.

   b. Explain the process used to determine price reasonableness, with maximum benefit to ratepayers.

   N/A – not a sales contract.

6. Portfolio Optimization Strategy

a. Describe how the proposed procurement (or sale) optimizes IOU's RPS portfolio (or entire energy portfolio). Specifically, a response should include:

i. Identification of IOU's portfolio optimization strategy objectives that the proposed procurement (or sale) are consistent with.

The Proposed Agreements are modifications to existing, approved agreements and are being done to enhance the viability of the proposed projects, rather than as part of portfolio optimization.

ii. Identification of metrics within portfolio optimization methodology or model (e.g. PPA costs, energy value, capacity value, interest costs, carrying costs, transaction costs, etc.) that are increased/decreased as a result of the proposed transaction.

As a result of the Proposed Agreements, the transmission costs associated with the Projects will decrease in the LCBF valuation because any network upgrades needed to ensure full capacity deliverability status for the Projects have already been constructed. That decrease in transmission costs gives the Projects a slight improvement in NMV over the NMV at their original location. Again, the Proposed Agreements arose in the context of enhanced project viability and not portfolio optimization.

iii. Identification of risks (e.g. non-compliance with RPS requirements, regulatory risk, over-procurement of non-bankable RPS-eligible products, safety, etc.) and constraints included in optimization strategy that may be decreased or increased due to proposed procurement (or sale).

If SDG&E were to experience a significant increase in project failure rate in its portfolio, then the risk of falling short in the amount of RPS-eligible generation in its portfolio would increase. While there is a very low probability that insufficient generation would become a problem for SDG&E, the Proposed Agreements help mitigate whatever level of risk exists simply by coming online as planned for and providing stability and predictability to the amount of generation SDG&E will have.

b. Description of how proposed procurement (or sale) is consistent with IOUs overall planned activities and range of transactions planned to optimize portfolio.

The Proposed Agreements are modifications to existing, approved agreements and are being undertaken in order to enhance the viability of the proposed projects, rather than as part of portfolio optimization. They provide support to SDG&E's portfolio optimization strategy because they provide stability to the amount of projected RPS-eligible generation and would be available to help fulfill RPS sales contracts entered into by SDG&E, if needed.

B. Bilateral contracting – if applicable

1. Discuss compliance 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."[5] In D.09-06-050, the Commission established 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. The Proposed Agreements do not alter the pricing of the original contracts, which the Commission found to be reasonable in Resolution No. E-4439. However, the market for non-concentrating solar photovoltaic technology has moved downward considerably in the intervening time, such that these CPV projects are no longer competitive when compared to SDG&E's most recent (2012) RPS Shortlist and other recently executed agreements. The comparison with other agreements is discussed in more detail in Part 2, Confidential Appendix A. The change in project location and interconnection requested in this Advice Letter improves the NMV of the projects slightly. Because the Proposed Agreements are amendments to existing, approved contracts, only their location, capacity factor and point of interconnection are at issue in this Advice Letter - the pricing will be the same regardless of location.

2. Specify the procurement and/or portfolio needs necessitating the utility to procure bilaterally as opposed to a solicitation.

At the time that the PPAs were originally signed, it had been more than one year since SDG&E had an RPS RFO and none was scheduled. Because of SDG&E's projected net short position at the time, because the PPAs would help support the location of a new CPV panel manufacturing facility in San Diego, and because the PPAs were competitive with the results of the prior RFO and with other bilateral agreements executed at the same time period, SDG&E pursued the PPAs on a bilateral basis.

[5] D.06-10-019, *mimeo*, p. 31.

3. Describe why the Project did not participate in the solicitation and why the benefits of the Project cannot be procured through a subsequent solicitation.

   At the time that the Projects were submitted to SDG&E for consideration, there was no RFO being conducted and no indication of when the next one might be held. As currently-approved PPAs, the benefits offered by the Projects, particularly the job creation and local economic benefits that accrued to San Diego due to the presence of the panel manufacturing facility cannot be procured in a subsequent solicitation. Those benefits have already come to fruition in that the factory is up and running and currently employs approximately 200 people.

C. Least-Cost, Best-Fit (LCBF) Methodology and Evaluation

1. Briefly describe IOU's LCBF Methodology and how the Project compared relative to other offers available to the IOU at the time of evaluation.

   SDG&E evaluates projects on the basis of Net Market Value, which consists of (1) a project's Levelized Contract Cost, (2) transmission network upgrade costs as determined by the costs of network upgrades as presented in the project's transmission cost studies, (3) congestion costs and (4) the deliverability value of the project to SDG&E, less (5) the Energy Benefit, a project's MPR cost as determined by the CPUC's AMF Calculator which incorporates TOD factors) and (6) the Capacity Benefit, which is the deliverability value of the project if it were to provide full deliverability and local resource adequacy within SDG&E's service territory, on the Sunrise Powerlink, or on the Southwest Powerlink west of the Imperial Valley substation. Offers are ranked on a levelized Net Market Value, $/MWh basis from highest to lowest value.

   When originally proposed to SDG&E and submitted to the Commission, the Projects were competitive with other recent market offers to SDG&E. In an NMV comparison of the Proposed Agreements to the most recent RPS RFO and other recently-executed agreements, the Projects were among the lowest NMV and would not have been shortlisted. The specific analysis of the Proposed Agreements is found in Part 2, Confidential Appendix A.

2. Indicate when the IOU's Shortlist Report was approved by Energy Division.

   SDG&E submitted the shortlist for the 2012 RFO to the Commission on June 7, 2013. The shortlist was approved by Energy Division on July 7, 2013.

D. Compliance with Standard Terms and Conditions (STCs)

1. Does the proposed contract comply with D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025?

   Yes, the Proposed Agreements contain all of the required non-modifiable Standard Terms and Conditions.

2. Using the tabular format, provide the specific page and section number where the RPS non-modifiable STCs are located in the contract.

Non-Modifiable Term	Contract Section Number	Contract Page Number
STC 1: CPUC Approval	1.1 of Original	6 of Original
STC 2: Green Attributes and RECs	1.1 of Original 3.1 (i) of Original	12-13 of Original 29 of Original
STC 6: Eligibility	10.2 of Original	51 of Original
STC 17: Applicable Law	13.8 of Original	59 of Original
STC REC 1: Transfer of RECs	10.2(b) of Original PPA	51 of Original
STC REC 2: WREGIS Tracking of RECs	3.1(l) of Original PPA	29-30 of Original
STC REC 3: CPUC Approval	N/A – not a REC contract	N/A

3. Provide a redline of the contract against the utility's Commission-approved pro forma RPS contract as Confidential Appendix E to the filed advice letter. Highlight modifiable terms in one color and non-modifiable terms in another.

   Previously provided in AL 2270-E.

E. Portfolio Content Category Claim and Upfront Showing (D.11-12-052, Ordering Paragraph 9)

1. Describe the contract's claimed portfolio content category.

   SDG&E believes that the Proposed Agreements will count as Category 1.

2. Explain how the procurement pursuant to the contract is consistent with the criteria of the claimed portfolio content category as adopted in D.11-12-052.

   The projects are located entirely within the state of California and have their first point of interconnection with the CAISO, a California Balancing Authority. All of the output from the Projects will be delivered directly to CAISO over the Projects' generation tie line and will not be firmed and shaped, nor will any substitute energy from any other source be used to effect delivery.

3. Describe the risks that the procurement will not be classified in the claimed portfolio content category.

   SDG&E does not foresee any risk to the claimed classification because the SDG&E is the Participating Transmission Owner for the Imperial

SB_GT&S_0391826

Valley Substation, a CAISO, the Projects' point of interconnection and delivery, and does not intend to remove that substation from CAISO control.

4. Describe the value of the contract to ratepayers if:

   a. Contract is classified as claimed

   If the Proposed Agreements are classified as claimed, ratepayers will benefit from having up to 153 MW of new clean energy projects located in the state and helping displace generation from sources that may be more polluting. Ratepayers will have these benefits for a period of 25 years.

   b. Contract is not classified as claimed

   If the contract classification were changed to Category 2, then ratepayers might be faced with higher costs for RPS energy if SDG&E had to procure additional volumes of Category 1 energy and RECs to comply with Pub. Util. Code Section 399.16(c)(1) or (2).

   That ratepayer risk would be compounded if the Proposed Agreement were classified as a Category 3, since starting in 2017 SDG&E will be limited to only ten percent (10%) of its total RPS portfolio qualifying for compliance in that category. Ratepayers would either be paying for RPS energy and RECs that could not be used for compliance and would have to be resold (presumably, at a lower cost) or be banked for future use.

5. Use the table below to report how the procurement pursuant to the contract, if classified as claimed, will affect the IOU's portfolio balance requirements, established in D.11-12-052.

Forecast of Portfolio Balance Requirements	**Compliance Period 2 (2014-2016)**	**Compliance Period 3 (2017-2020)**
PCC 1 Balance Requirement *CP 2 = 65% of RECs applied to procurement quantity requirement* *CP 3 = 75% of RECs applied to procurement quantity requirement*		
Quantity of PCC 1 RECs (under contract, not including proposed contract)	10,429	18,362
Quantity of PCC 1 RECs from proposed contract	677	1,503
Quantity of PCC 2 RECs	0	0
Quantity of PCC 2 RECs (under contract, not including proposed contract)	0	0

Quantity of PCC 2 RECs from proposed contract	0	0
PCC 3 Balance Limitation *CP 2 = 15% of RECs applied to procurement quantity requirement* *CP 3 = 10% of RECs applied to procurement quantity requirement*		
Quantity of PCC 3 RECs (under contract, not including proposed contract)	0	0
Quantity of PCC 3 RECs from proposed contract	0	0

F. Long-Term Contracting Requirement

D.12-06-038 established a long-term contracting requirement that must be met in order for an IOU to count RPS procurement from contracts less than 10 years in length ("short-term contracts") toward RPS compliance.

1. Explain whether or not the proposed contract triggers the long-term contracting requirement.

   Each of the Proposed Agreements is for a term of 25 years, and therefore the requirement is not triggered.

2. If the long-term contracting requirement applies, provide a detailed calculation that shows the extent to which the utility has satisfied the long-term contracting requirement. If the requirement has not yet been satisfied for the current compliance period, explain how the utility expects to satisfy the quantity by the end of the compliance period to count the proposed contract for compliance.

   N/A

G. Tier 2 Short-term Contract "Fast Track" Process – if applicable

THIS SECTION IS NOT APPLICABLE TO THE PROPOSED AGREEMENTS

1. Is the facility in commercial operation? If not in commercial operation, explain the IOU's basis for its determination that commercial operation will be achieved within the required six months.

   N/A

2. Describe and explain any contract modifications to the Commission-approved short-term pro forma contract.

   N/A

H. Interim Emissions Performance Standard

In D.07-01-039, the Commission adopted a greenhouse gas Emissions Performance Standard (EPS) which is applicable to an electricity contract for baseload generation, as defined, having a delivery term of five years or more.

1. Explain whether or not the contract is subject to the EPS.

   The Proposed Agreements are for as-available energy with a capacity factor below 60%. They are therefore not subject to the EPS.

2. If the contract is subject to the EPS, discuss how the contract is in compliance with D.07-01-039.

   N/A

3. If the contract is not subject to EPS, but delivery will be firmed/shaped with specified baseload generation for a term of five or more years, explain how the energy used to firm/shape meets EPS requirements.

   N/A – No firming or shaping is required.

4. If the contract term is five or more years and will be firmed/shaped with unspecified power, provide a showing that the utility will ensure that the amount of substitute energy purchases from unspecified resources is limited such that total purchases under the contract (renewable and non-renewable) will not exceed the total expected output from the renewable energy source over the term of the contract.

   N/A – No firming or shaping is required.

5. If substitute system energy from unspecified sources will be used, provide a showing that:

   a. the unspecified energy is only to be used on a short-term basis; and

   b. the unspecified energy is only used for operational or efficiency reasons; and

   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; or

   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.

   N/A – No firming or shaping is required.

I. Procurement Review Group (PRG) Participation

1. List PRG participants (by organization/company).

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

California Department of Water Resources
California Public Utilities Commission – Energy Division
California Public Utilities Commission –Office of Ratepayer Advocates
The Utility Reform Network
Union of Concerned Scientists
Coalition of California Utility Employees

2. Describe the utility's consultation with the PRG, including when information about the contract was provided to the PRG, whether the information was provided in meetings or other correspondence, and the steps of the procurement process where the PRG was consulted.

   The Proposed Agreements were presented to and discussed with the PRG on September 20, 2013, October 18, 2013 and November 15, 2013. The discussions with the PRG included detailed discussion of the proposed terms of the amendments as negotiations progressed, the reasons behind the requests that the Seller was making, and feedback as to what the PRG members believed was reasonable to accept. The presentation materials are provided in Part 2, Confidential Appendix A.

3. For short-term contracts, if the PRG was not able to be informed prior to filing, explain why the PRG could not be informed.

   N/A

J. 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. Provide name of IE.

   SDG&E's IE for renewables procurement is PA Consulting Group.

2. Describe the oversight provided by the IE.

   The IE works collaboratively with SDG&E to design the RFO and the LCBF process. The IE also performs an independent ranking of the RFO bids and double checks that SDG&E is applying the LCBF process appropriately and that the SDG&E shortlist matches the IE shortlist. The IE monitors the progress of contract negotiations and, finally, prepares an independent report on the fairness of the negotiations and the value of the Proposed Agreements. The IE was provided copies of the initial proposed amendment from the Seller to SDG&E, along with copies of all subsequent documents exchanged. The IE was also invited to participate in all discussions with the counterparty once negotiations over the amendment began in earnest.

3. List when the IE made any findings to the Procurement Review Group regarding the applicable solicitation, the project/bid, and/or contract negotiations.

SDG&E does not keep minutes of the PRG meetings, but the IE was in attendance when the Proposed Agreements were presented to the PRG. The IE's specific analysis and recommendations are included in the project-specific IE Report, Confidential Appendix C to Part 2 of this Advice Letter.

4. Insert the public version of the project-specific IE Report.

IE Report PUBLIC

III. PROJECT DEVELOPMENT STATUS

A. Company / Development Team

1. Describe the Project development team and/or company principals and describe how many years of experience they have had on the development side of the electric industry.

The Projects are currently owned and under development by Soitec of France, the technology company behind the CPV technology that the Projects will utilize. The Executive Vice President responsible for the solar energy division of Soitec has more than 20 years of experience in the industry, including more than 10 years working with solar.

2. List any successful projects (renewable and conventional) the Project development team and/or company principals have owned, constructed, and/or operated.

The current developer, Soitec, has successfully developed the 2.7 MWp Hami I project in China and the 1.37 MWp Chevron project in Questa, New Mexico, along with the recently completed 1.5 MWac Newbury Solar I project in San Bernardino County, California. The Newbury Solar I project is under a 20-year PPA with Southern California Edison Company.

B. Technology

1. Technology Type and Level of Technology Maturity

a. Discuss the type and stage of the Project's proposed technology (e.g. concept state, testing stage, commercially operating, utility-scale operation, ample history of operation).

The CPV technology for the Projects has been in use since 2005, with approximately 14 MWp in commercial operation and an additional 50 MWp under construction. Approximately 3 MWp of currently operational projects are located in the United States. Besides the completed projects, there are approximately 280 WMp in development, including the four Proposed Agreements.

b. If the technology has not been commercially demonstrated, identify whether the developer has or plans to have a demonstration project. Describe the project (MW, hours run), its results (e.g., temperature, GWh, or other appropriate metric) and its ability to perform on a commercial scale.

The technology has been commercially demonstrated, but not on a utility scale. There is currently a 44 MWp project in South Africa that was financed using a bond, only the third bond financing of a solar project in the world. If that project successfully passes its initial performance testing, the bond financing will be released and become the first commercial financing of the technology.

c. If hybrid technology will be deployed, describe the configuration and potential issues and/or benefits created by the hybrid technology.

N/A

2. Quality of Renewable Resource

a. Explain the quality of the renewable resource that the Project will rely upon. Provide supporting documentation, such as project-specific resource studies, reports from RETI or the National Renewable Energy Lab (NREL) that supports resource quality claims and ability for the facility to provide expected generation.

The projects may be located in the Imperial Valley, in an area with several hundred megawatts of additional solar projects either under construction or in operation.

The solar resource in the Imperial Valley. Soitec has used multiple resources to validate the solar resource for the projects including the NREL TMI satellite data as well as relevant on-site measurements. Soitec also hired a third-party consultant to produce a report that validates the long-term expectations of the solar resource.

b. For biomass projects, please provide a fuel resource analysis and the developer's fuel supply plan. Identify:

i. From whom/where the fuel is being secured; and

ii. Where the fuel is being stored

N/A – not a biomass project.

c. Explain whether the IOU believes that the Project will be able meet the terms of the contract given its independent understanding of the quality of the renewable resource. If necessary, reference successful nearby projects, completed studies, and/or other information.

SDG&E believes that the Projects will be able to meet ther terms of the contract. The Projects are located in an area with many hundreds of megawatts of solar facilities either under construction or online and delivering power. The Imperial Valley has proven itself as an area with abundant sunshine and capable of supporting the requirements of the Proposed Agreements.

3. Other Resources Required

a. Identify any other fuel supply (other than the renewable fuel supply discussed above) necessary to the Project and the anticipated source of that supply;

NONE

b. Explain whether the developer has secured the necessary rights for water, fuel(s), and any other required inputs to run the Project.

Water rights have been secured from the Imperial Irrigation District.

c. Provide the estimated annual water consumption of the facility (gallons of water/year).

5.2 acre feet per year for all four Projects combined.

d. Explain whether the IOU believes that the Project will be able meet the terms of the contract given its independent understanding of the adequacy of the additional fuel or any other necessary resource supply. If necessary, reference successful nearby projects, completed studies, and/or other information.

SDG&E believes that the Projects will be able to meet the terms of their contracts so long as the panel manufacturer is able to produce all of the necessary panels on the needed schedule.

C. <u>Development Milestones</u>

1. Site Control

Explain the status of Project site control, including:

a. Site control type (e.g. ownership, lease, BLM Right-of-Way grant, etc.)

i. If lease, describe duration of site control and any exercisable extension options

It is anticipated that the developer will acquire rights to the site that will exceed the delivery term of the PPAs.

ii. Level or percent of site control attained – if less than 100%, discuss seller's plan for obtaining full site control

It is anticipated that the developer will have full site control upon completion of the transfer of the PPAs.

2. Equipment Procurement

Explain the status of equipment procurement for the Project, including:

a. The status of the procurement of major equipment (e.g. equipment in-hand, contracts executed and equipment in delivery, negotiating contracts with supplier(s), etc.). For equipment not yet procured, explain any contingencies and overall timing.

Soitec, the current developer of the project, expects to finalize and execute one or more supply agreements for the CPV modules shortly.

b. The developer's history of ability to procure equipment.

Soitec has successfully brought 14 MWp of capacity online and operating and has completed construction of its 44 MWp project in South Africa, with an additional 6 MWp under construction.

c. Any identified equipment procurement issues, such as lead time, and their effect on the Project's date of operability.

SDG&E is unaware of any such issues.

3. Permitting / Certifications Status

a. Describe the status of the Project's RPS-eligibility certification from the CEC. Explain if there is any uncertainty regarding the Project's eligibility.

The Projects have obtained their preliminary CEC certification and expect to receive final certification shortly after reaching COD. No problems are expected.

b. Use the following table to describe the status of all major permits or authorizations necessary for development and operation of the Project, including, without limitation, CEC authorizations, air permits, certificates of public convenience and necessity (CPCN) or permits to construct (PTC) for transmission, distribution, or substation construction/ expansion, land use permits, building permits, water use or discharge authorizations, Federal Aviation Administration authorizations, military authorizations, and Federal Communication Commission authorizations. If necessary, table may be split between public and confidential sections – permits requests with public agencies should be included in the public portion.

//

//

//

//

//

//

//

//

//

//

//

//

//

//

//

//

//

Name of Permit or Lease required	Grantor	Description of Permit or Lease	Current Status (to be filed, pending approval, approved)	Projected timeframe for approval
CEC RPS Pre-Certification	CEC	RPS Pre-Certification for RPS eligibility	Received – All PPAs	Complete
CEC RPS Certification	CEC	RPS Certification for RPS eligibility	To be filed - COD	30 – 90 days from COD
Air Permits	Imperial Valley APCD	Permits for emergency generators	To be filed January, 2014	2 months from submission
EIR	Imperial County	Satisfies CEQA requirements (PPA Major Government Approval)	Approved	Complete
CPCN/PTC for utility's transmission and substation construction	CPUC		Approved	Complete
IID Encroachment Agreement	IID	Agreement / Approval of project design	Filed October, 2013	2 months from submission
Land Use Permit	Imperial County	Conditional Use Permit	Approved	Complete
Grading Permit	Imperial County	Grading / mobilization to begin construction	To be filed mid December, 2013	2 months from submission
Construction Permit	Imperial County	Commence improvements / installation work	To be filed mid January, 2014	2 months from submission
Water Use	IID	Water use rights	Approved	Complete
Water Discharge	IID	Water discharge rights	Approved	Complete
FERC Approval of LGIA	FERC	FERC approval of LGIA	To be filed February, 2014 (if required)	60 days after filing

SB_GT&S_0391835

FCC	Not Required	NA	NA	NA
FAA	Not Required	NA	NA	NA
Military	Not Required	NA	NA	NA

4. Production Tax Credit (PTC) / Investment Tax Credit (ITC) / Other government funding– if applicable

   a. Explain the Project's potential eligibility for tax credits or other government funding based on the technology of the Project and contract operation date.

      Each of the Projects qualifies for the standard Federal Investment Tax Credits.

   b. If the developer is pursuing PTCs/ITCs/Other, explain the criteria that must be met and the developer's plans for obtaining the PTCs/ITCs/Other.

      The developer plans to obtain the ITCs by ensuring that the Projects achieve commercial operation prior to the December 31, 2016 expiration date.

   c. Explain whether the utility or the seller bears the risk if the anticipated tax credits/funding are not obtained.

      ITC risk is borne entirely by the Seller.

5. Transmission

   a. Discuss the status of the Project's interconnection application, whether the Project is in the CAISO or any other interconnection queue, and which transmission studies are complete and/or in progress.

      The Proposed Agreements contemplate that the Projects will be assigned to an existing interconnection agreement owned by the current developer on that site. The interconnection agreement can accommodate the full capacity of the four Projects, but must be amended to accommodate four Projects. Discussions around the necessary amendments are taking place now.

   b. Discuss the status of the Interconnection Agreement with the interconnecting utility (e.g., draft issued, executed and at FERC, fully approved).

      Both the CAISO and SDG&E are counterparties to the existing LGIA and are working with the Seller to effect the necessary amendments to accommodate the Projects.

   c. Describe the required network and gen-tie upgrades and the capacity to be available to the Project upon completion, including any proposed curtailment schemes.

The network upgrades required to make the 150 MW LGIA fully deliverable have already been constructed.

d. Describe any required substation upgrades or construction.

None required.

e. Discuss the timing and process for all transmission-related upgrades. Identify critical path items and potential contingencies in the event of delays.

The network upgrades required to make the 150 MW LGIA fully deliverable have already been constructed.

f. Explain any issues relating to other generating facility projects in the transmission queue as they may affect the Project.

SDG&E is unaware of any such issues.

g. If the Project is dependent 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, explain how the utility factored the congestion into the LCBF bid analysis.

SDG&E's LCBF analysis relies on the results of congestion studies performed by SDG&E's transmission planning group and congestion from the IV Substation to SDG&E's load center is shown in the LCBF analysis in Part 2. The Projects are expected to deliver utilizing the capacity made available by completion of the Sunrise Powerlink, and no deliverability problems are expected during the first several years of operation.

h. Describe any alternative transmission arrangements available and/or considered to facilitate delivery of the Project's output.

SDG&E is unaware of any superior arrangement.

D. Financing Plan

1. Explain developer's manner of financing (e.g. project financing, balance sheet financing, utility tax equity investment, etc.).

The current developer intends to sell the Projects to a third party developer upon Commission approval of this Advice Letter. The new owner is contemplated to finance the Projects on balance sheet and may elect to pursue options such as ITC financing.

2. Describe the developer's general project financing status.

The current developer intends to sell the Projects to a third party developer upon Commission approval of this Advice Letter.

3. To what extent (%) has 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?

The current developer intends to sell the projects to a third party owner/developer and has not secured any financing commitments on its own.

4. List any government funding or awards received by the Project.

   None

5. Explain the creditworthiness of all relevant financiers.

   N/A

6. Describe developer's history of ability to procure financing

   Soitec, the current developer, has successfully financed the 14 MWp of operating projects, including projects in California and the U.S. According to Soitec, its bond financing of its South Africa project was only the third such bond financing in the industry. It is anticipated that the third party owner/developer who will acquire the Projects from Soitec will finance the projects on balance sheet.

7. Describe any plans for obtaining subsidies, grants, or any other third party monetary awards (other than Production Tax Credits and Investment Tax Credits) and discuss how the lack of any of this funding will affect the Project.

   No such plans are in place, and therefore do not constitute a financing risk for the Projects.

IV. CONTINGENCIES AND/OR MILESTONES

Describe major performance criteria and guaranteed milestones, including those outside the control of the parties, including transmission upgrades, financing, and permitting issues.

The effectiveness of the Third Amendments is conditioned upon Commission approval and the successful transfer of the Project to a new project company (that may be owned by Soitec Inc. or a third party developer). The effectiveness is further conditioned upon the execution of an amendment to the existing LGIA for the Imperial Valley sites that allows for the interconnection, metering and full capacity deliverability for the Projects with no further network upgrades. SDG&E is unaware of any other conditions tied to financing, permitting or transmission/interconnection.

If any of the conditions precedent to the Third Amendment are not satisfied, then the PPAs as amended by the First Amendment and the Second Amendment will remain in full force and effect.

V. SAFETY CONSIDERATIONS

A. What terms in the PPA address the safe operation, construction and maintenance of the Project? Are there any other conditions, including but not limited to conditions of any permits or potential permits, that the IOU is aware of that ensure such safe operation, construction and decommissioning?

   The Proposed Agreements leave undisturbed the requirements in the existing PPAs that the project be operated in accordance with Good Utility Practice and the CAISO Tariff. The Projects also need to comply with all conditions in their permits regarding safety, including during the decommissioning process, which is typically part of such permits.

B. What has the IOU done to ensure that the PPA and the Project's operation are: consistent with Public Utilities Code Section 451; do not interfere with the IOU's safe operation of its utility operations and facilities; and will not adversely affect the public health and safety?

The Proposed Agreement leaves undisturbed the requirements in the existing PPA that the project must be operated consistent with industry mandated reliability criteria and Good Utility Practice. Additionally, the Projects may be curtailed by the local transmission operator or the CAISO in order to maintain safe and reliable operation of the electric grid.

C. If PPA or amendment is with an existing facility, please provide a matrix that identifies all safety violations found by any entity, whether government, industry-based or internal with an indication of the issue and if the resolution of that alleged violation is pending or resolved and what the progress or resolution was/is.

N/A – all of the Projects are proposed new facilities.

D. If PPA or amendment is with an existing facility, will the PPA or amendment lead to any changes in the structure or operations of the facility? Any change in the safety practices at the facility? If so, with what federal, state and local agencies did the developer confer or seek permits or permit amendments for these changes?

N/A – all of the Projects are proposed new facilities.

VI. PROCEDURAL MATTERS

A. Requested Relief

SDG&E respectfully requests that the Commission review and approve the Proposed Agreements through the issuance of a final resolution no later than January 16, 2014, which finds that SDG&E's entry into the Proposed Agreements and the terms of such agreements are reasonable; therefore, all costs associated with the Proposed Agreements, including for energy, green attributes, and resource adequacy, should be fully recoverable in rates.

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

1. The Proposed Agreements, and in particular the Third Amendments, are reasonable and consistent with SDG&E's Commission-approved RPS Plan and; procurement from the Proposed Agreements will contribute towards SDG&E's RPS procurement obligation.

2. SDG&E's entry into the Third Amendments and the terms of such Third Amendments are reasonable; therefore, the Third Amendments are approved in their entirety and all costs of the purchase associated with the Proposed Agreements, including for energy, green attributes, and resource adequacy are fully recoverable in rates over the life of the Proposed Agreements, subject to Commission review of SDG&E's administration of the Proposed Agreements.

3. Generation procured pursuant to the Proposed Agreements constitutes generation from eligible renewable energy resources for purposes of determining SDG&E's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewable Portfolio Standard program (Public Utilities Code §§ 399.11, *et seq*. and/or other applicable law) and relevant Commission decisions.

4. The Proposed Agreements will contribute to SDG&E's minimum quantity requirement established in D. 12-06-038.

B. Protest

Anyone may protest this advice letter to the California Public Utilities Commission. Any protest to this advice letter 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 December 17, 2013, which is twenty (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 the Energy Division at EDtariffUnit@cpuc.ca.gov. It is also requested that a copy of the protest be sent via electronic mail and facsimile to SDG&E on the same date it is mailed or delivered to the Commission (at the addresses shown below).

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

C. Effective Date

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 January 16, 2014.

D. Notice

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

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

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: Joff Morales
☒ ELC ☐ GAS	Phone #: (858) 650-4098
☐ PLC ☐ HEAT ☐ WATER	E-mail: jmorales@semprautilities.com

EXPLANATION OF UTILITY TYPE	(Date Filed/ Received Stamp by CPUC)
ELC = Electric GAS = Gas PLC = Pipeline HEAT = Heat WATER = Water	

Advice Letter (AL) #: 2552-E

Subject of AL: Request for Approval of Amended Renewable Power Purchase Agreements with Tierra Del Sol Solar Farm LLC, LanWest Solar Farm, LanEast Solar Farm LLC and Rugged Solar LLC

Keywords (choose from CPUC listing): Renewable, Power Purchase

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☐ One-Time ☒ Other

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

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: None

Summarize differences between the AL and the prior withdrawn or rejected AL[1]: N/A

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

Resolution Required? ☒ Yes ☐ No Tier Designation: ☐ 1 ☐ 2 ☒ 3

Requested effective date: 1/16/2014 No. of tariff sheets: 0

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

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

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

Tariff schedules affected: None

Service affected and changes proposed[1]: N/A

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
Attention: Tariff Unit
505 Van Ness Ave.,
San Francisco, CA 94102
EDTariffUnit@cpuc.ca.gov

San Diego Gas & Electric
Attention: Megan Caulson
8330 Century Park Ct, Room 32C
San Diego, CA 92123
mcaulson@semprautilities.com

[1] Discuss in AL if more space is needed.

SB_GT&S_0391842

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

cc: (w/enclosures)

Public Utilities Commission
DRA
Y. Schmidt
W. Scott
Energy Division
P. Clanon
S. Gallagher
H. Gatchalian
D. Lafrenz
M. Salinas
CA. Energy Commission
F. DeLeon
R. Tavares
Alcantar & Kahl LLP
K. Harteloo
American Energy Institute
C. King
APS Energy Services
J. Schenk
BP Energy Company
J. Zaiontz
Barkovich & Yap, Inc.
B. Barkovich
Bartle Wells Associates
R. Schmidt
Braun & Blaising, P.C.
S. Blaising
California Energy Markets
S. O'Donnell
C. Sweet
California Farm Bureau Federation
K. Mills
California Wind Energy
N. Rader
CCSE
S. Freedman
J. Porter
Children's Hospital & Health Center
T. Jacoby
City of Chula Vista
M. Meacham
E. Hull
City of Poway
R. Willcox
City of San Diego
J. Cervantes
G. Lonergan
M. Valerio
Commerce Energy Group
V. Gan
Constellation New Energy
W. Chen
CP Kelco
A. Friedl
Davis Wright Tremaine, LLP
E. O'Neill
J. Pau

Dept. of General Services
H. Nanjo
M. Clark
Douglass & Liddell
D. Douglass
D. Liddell
G. Klatt
Duke Energy North America
M. Gillette
Dynegy, Inc.
J. Paul
Ellison Schneider & Harris LLP
E. Janssen
Energy Policy Initiatives Center (USD)
S. Anders
Energy Price Solutions
A. Scott
Energy Strategies, Inc.
K. Campbell
M. Scanlan
Goodin, MacBride, Squeri, Ritchie & Day
B. Cragg
J. Heather Patrick
J. Squeri
Goodrich Aerostructures Group
M. Harrington
Hanna and Morton LLP
N. Pedersen
Itsa-North America
L. Belew
J.B.S. Energy
J. Nahigian
Luce, Forward, Hamilton & Scripps LLP
J. Leslie
Manatt, Phelps & Phillips LLP
D. Huard
R. Keen
Matthew V. Brady & Associates
M. Brady
Modesto Irrigation District
C. Mayer
Morrison & Foerster LLP
P. Hanschen
MRW & Associates
D. Richardson
OnGrid Solar
Andy Black
Pacific Gas & Electric Co.
J. Clark
M. Huffman
S. Lawrie
E. Lucha
Pacific Utility Audit, Inc.
E. Kelly
R. W. Beck, Inc.
C. Elder

School Project for Utility Rate Reduction
M. Rochman
Shute, Mihaly & Weinberger LLP
O. Armi
Solar Turbines
F. Chiang
Sutherland Asbill & Brennan LLP
K. McCrea
Southern California Edison Co.
M. Alexander
K. Cini
K. Gansecki
H. Romero
TransCanada
R. Hunter
D. White
TURN
M. Florio
M. Hawiger
UCAN
M. Shames
U.S. Dept. of the Navy
K. Davoodi
N. Furuta
L. DeLacruz
Utility Specialists, Southwest, Inc.
D. Koser
Western Manufactured Housing Communities Association
S. Dey
White & Case LLP
L. Cottle
Interested Parities
R.11-05-005

San Diego Gas & Electric Advice Letter 2552-E
November 27, 2013

CONFIDENTIAL DECLARATION

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF THEODORE E. ROBERTS REGARDING CONFIDENTIALITY OF CERTAIN DATA

I, Theodore E. Roberts, do declare as follows:

1. I am the Origination Manager for San Diego Gas & Electric Company ("SDG&E"). I have reviewed the attached Advice Letter No. 2552-E , including Confidential Appendices A, B, C, D, E, F and G (the "Protected Information"), and am personally familiar with the facts and representations in this Declaration. 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 Responses submitted concurrently herewith, falls within the scope of data protected pursuant to the IOU Matrix attached to D.06-06-066 (the "IOU Matrix").[1/] 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."[2/]

[1/] 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. SDG&E's Protected Information: As directed by the Commission, The instant confidentiality request satisfies the requirements of D.06-06-066[4/] because the information contained in the Confidential Appendices provided by SDG&E is of the type of information protected by the Matrix as follows:

Confidential Appendix A – Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.; Contract Terms and Conditions, Category VII.G.; Total Energy Forecast, Category V.C.

Confidential Appendix B - Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.

Confidential Appendix C - Bid Information, Category VIII.A.; Specific Quantitative Analysis, Category VIII.B.; Contract Terms and Conditions, Category VII.G.; Total Energy Forecast, Category V.C.

Confidential Appendix D - Contract Terms and Conditions, Category VII.G; Specific Quantitative Analysis, Category VIII.B.

Confidential Appendix E - Contract Terms and Conditions, Category VII.G.

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

4/ *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").

Confidential Appendix F - Contract Terms and Conditions, Category VII.G.
Confidential Appendix G - Contract Terms and Conditions, Category VII.G.

5. As an alternative basis for requesting confidential treatment, SDG&E submits that the Power Purchase Agreement enclosed in the Advice Letter is material, market sensitive, electric procurement-related information protected under §§ 454.5(g) and 583, as well as trade secret information protected under Govt. Code § 6254(k). Disclosure of this information would place SDG&E at an unfair business disadvantage, thus triggering the protection of G.O. 66-C.[1]

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, 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.

---

[1] 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.")

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.[5] 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.[6]

10. If disclosed, the Protected Information could provide parties, with whom SDG&E is currently negotiating, insight into SDG&E's procurement strategies, which would give them an unfair negotiating advantage and could ultimately result in increased cost to ratepayers. In addition, if developers mistakenly perceive that SDG&E is not committed to assisting their projects, disclosure of the Protected Information could act as a disincentive to developers. Accordingly, pursuant to P.U. Code § 583, SDG&E seeks confidential treatment of this data, which falls within the scope of P.U. Code § 454.5(g), Evidence Code § 1060 and General Order 66-C.

11. Developers' Protected Information: The Protected Information also constitutes confidential trade secret information of the developer listed therein. SDG&E

---

[5] *See also* Govt. Code § 6254.7(d).
[6] *See*, D.06-06-066, *mimeo*, pp. 26-28.

is required pursuant to the terms of the PPA to protect non-public information. Some of the Protected Information in the PPA relates directly to the viability of the project. Disclosure of this extremely sensitive information could harm the developer's ability to negotiate necessary contracts and/or could invite interference with project development by competitors.

12. In accordance with its obligations under its PPA 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 27th day of November, 2013 at San Diego, California.

Theodore E Roberts

Theodore E. Roberts
Origination Manager
Electric & Fuel Procurement
San Diego Gas & Electric

PART 2 CONFIDENTIAL APPENDICES A-G

REDACTED FROM PUBLIC VERSION OF ADVICE LETTER

San Diego Gas & Electric Advice Letter 2552-E
November 27, 2013

INDEPENDENT EVALUATOR REPORT

(PUBLIC)

San Diego Gas & Electric Co.

Report of the Independent Evaluator on the Second and Third Amendments to the LanWest, LanEast, Desert Green, Tierra del Sol and Rugged contracts relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO)

November 26, 2013

PA

San Diego Gas & Electric Co.

Report of the Independent Evaluator on the Second and Third Amendments to the LanWest, LanEast, Desert Green, Tierra del Sol and Rugged contracts relative to the results of the 2009 Request for Offers from Eligible Renewable Resources (2009 Renewable RFO)

November 26, 2013

Prepared by: Jonathan M. Jacobs

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

Version: 1.4

PA

FOREWORD

This is PA Consulting Group's Independent Evaluator (IE) Report analyzing the Third Amendment to four contracts between San Diego Gas & Electric Company (SDG&E) and subsidiaries of Soitec for concentrating photovoltaic projects. Three contracts (LanWest, LanEast and Desert Green) were executed in April 2011, but there is no Third Amendment to the Desert Green contract. The remaining two contracts (Tierra Del Sol and Rugged) were executed in May 2011. It is our understanding that the Third Amendments to the LanWest, LanEast, Tierra Del Sol and Rugged contracts are being submitted to the CPUC via a single Advice Letter, and that SDG&E believes that the Second Amendments (to all five contracts) do not have to be submitted to the CPUC. The five projects were not bid into any of SDG&E's Renewables RFOs.

This report is styled as a revision to PA's report on the contract as previously amended. The most recent report was dated Sept 20, 2011 and was filed with the Commission on Sept. 23, 2011, covered by Advice Letter 2270-E-A. The Sept. 29 report was a revision to a previous report dated June 28, 2011.

The reports were 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.

The CPUC requires an IE report accompany any bilateral contract submitted for approval, and the template provided by the CPUC relates to RFOs. Since these contracts were not submitted into any RFO, PA based its report upon its IE report for the most recently completed RPS RFO as of the time of writing (the 2009 RPS RFO). CPUC Resolution E-4199 states that contract repricings should always be compared to the most recent MPR. The September 2011 revision, while based on the report for the 2009 RFO, also references the results of the then recently completed 2011 RFO. This report in turn references the results of the 2013 RFO.

In the body of the report (that is, except for this Foreword), text from the earlier versions of the 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.

TABLE OF CONTENTS

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.[1] 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.[2] 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 2008[5] 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."[6] 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."[6A] 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."[6B] 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.

"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 way[7].

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.

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. 56 separate organizations responded to the solicitation with a total of 158 project proposals with 289 pricing options. The CPUC had encouraged SDG&E to do specific outreach to the Imperial Valley and, more generally, the SPL area. 34 project proposals were submitted from the SPL area, with 67 pricing options, from a total of 22 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.

- 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 guaranteed 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 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

PA did not detect any technology bias in the methodology; however there were certain biases present in the qualitative evaluation which should be mentioned.

First, SDG&E preferentially selected bids in the Imperial Valley or "SPL area". This is consistent with other commitments SDG&E has made, for example to replace failed projects with projects from the SPL area. This geographic bias had no technology component and comports with the CPUC's policy directive to encourage development in the Imperial Valley. PA believes that it is reasonable for SDG&E to exercise such a bias provided that it is does not depend on the identities of bidders, and that SDG&E only uses it to distinguish among projects of substantially similar LCBF rankings.

Second, SDG&E decided against selecting any out-of-state wind projects. These projects were generally the lowest-priced offers and required "firming and shaping" arrangements to deliver their power to California. SDG&E recently had several hundred MW of out-of-state wind contracts approved by the CPUC and was probably influenced by recent public discussion, including in the Legislature, against the use of out-of-state projects for RPS compliance. PA disagreed with this decision but did not strongly advocate against it, because it was a legitimate exercise of SDG&E's judgment.

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.[10] SDG&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. In one case SDG&E relied on its own experience analyzing and eliminating a potential developer site that was subsequently bid into the 2009 RFO.

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:

- A "hybrid combined-cycle plant" consisting of a solar thermal plant that provided heat to the steam turbine of a gas-fired combined-cycle plant. Because only a minority of the energy produced would be RPS-qualified the bid did not conform to the RPS RFO. PA suggested that the plant could qualify if the gas-fired energy were accepted in SDG&E's ongoing conventional RFO, but it did not so qualify
- An offer of "firming and shaping" services that did not provide any net renewable energy
- An offer that was deemed equivalent to a financial contract providing no net renewable energy
- An offer using a unique technology that would be sited within SDG&E's gas distribution network but for which, despite repeated efforts, we were unable to obtain sufficient information on which to base an evaluation. Because of the potentially interesting and unusual (although possibly incompletely developed) technology, PA has recommended that SDG&E be open to this bidder on a bilateral basis.

In addition, several offers including "negotiation prices" or unspecified "SDG&E participation" in development were eliminated as being incompletely priced. In each case, these were additional options associated with PPA offers, so that the projects themselves were not eliminated.

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, 158 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. PA rescored a total of 52 of the 53 highest-ranked projects (based on LCBF ranking); the unscored project is already in operation and therefore 100% viable.

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

Before any bids were received, PA expressed to SDG&E its concern that much of the current base of RPS contracts is dependent on the completion of the Sunrise Power Link (Sunrise) transmission project. PA did not express such concern in 2009 and there was no particular evaluation of concentration risk. There were two reasons for this: (1) The Sunrise project has received its regulatory approval, removing a major risk factor and also relieving any concern about the impact of bid selection on that approval; (2) The CPUC specifically instructed SDG&E to encourage bidders who would deliver over Sunrise.

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."[13] 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.

with viability scores below 75. In both cases the volume was about 1600 GWh, so SDG&E determined its need for this RFO was 1600 GWh per annum. Since those projects (the largest individual volume, and the contracts with viability scores below 75) were all in the SPL region, 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.

SDG&E then decided to create "exceptions" that would allow it to shortlist for existing projects (including a high-viability repowering), a biogas project (owing to another regulatory commitment) and the highest-ranking project located in the Borrego Springs area, where SDG&E has a particular reliability need. PA was skeptical of the decision to shortlist the biogas project, which had low viability, but that disagreement was resolved when the biogas project withdrew. The repowering project has not informed SDG&E whether it accepted shortlisting, and so PA intended contacted the developer who said they had not accepted shortlisting because SDG&E would not extend their reply deadline. The Borrego Springs project had a lower LCBF ranking than another Borrego project, but a higher viability score [redacted] The difference in ranking prices is approximately [redacted]. Because a turnkey project provides the utility an opportunity to earn a return, PA would generally trust that the utility has exercised its judgment fairly in turning down a turnkey project, in favor of a slightly more expensive PPA project, on qualitative grounds.

SDG&E generally shortlisted bids in order of LCBF ranking, but in two cases chose not to shortlist bids due to low viability. The viability scores are illustrated in Figure 1. The two rejected bids are indicated by red X's. In one case the bidder had not provided a Project Viability Calculator; in the other, PA and SDG&E agreed that the bidder's self-score was overly optimistic. This graph also indicates the biogas project, which had not provided a self-score and to which PA attributed a viability score [redacted]

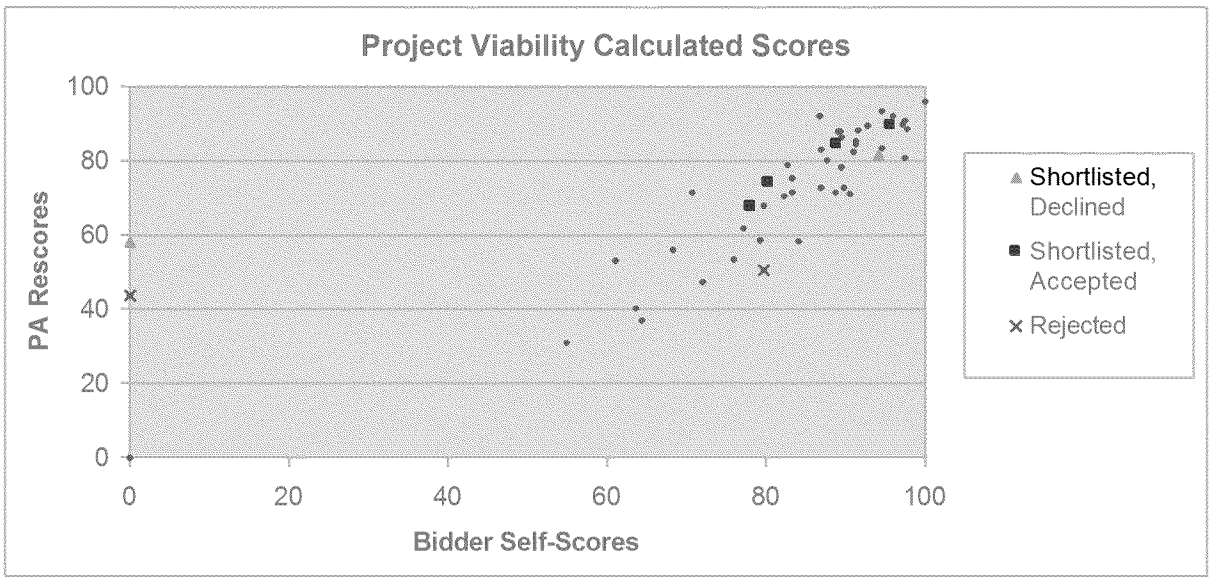


Figure 1 - Project Viability Scores

The shortlist contains one existing wind project (27 GWh), three projects in the SPL area (about 1500 GWh), and the Borrego Springs project (45 GWh). SDG&E has not achieved its 1600 GWh of "need" in the SPL area, basically by having shortlisted the wind repowering, but has shortlisted a reasonable project portfolio. This is in contrast to the 2008 RFO, where SDG&E shortlisted three times its identified need but wound up terminating negotiations with many counterparties. PA believes that a smaller shortlist (3 projects) will be easier for SDG&E to manage.

In PA's opinion, SDG&E conducted the RFO in fair and equitable manner. There were areas in which PA and SDG&E disagreed, as has been noted, but in each case PA believes that these were issues on which reasonable parties could disagree and that SDG&E, as the party at risk to meet its RPS objective, should have the prerogative to make those decisions.

One affiliate bid, Sempra Generation Energia Sierra Juarez - Jacume, is on the short list reported above. Of the SPL-area projects bid into this RFO, it was the second most highly ranked in the LCBF analysis. Although the project will be in Mexico, its generation tie will cross the border and interconnect in the Imperial Valley. The LCBF ranking was based on an "indicative price" bid of [redacted]; Sempra Generation's proposal said that they preferred to contract on an "open book", cost-plus basis but provided their indicative bid as an estimate. PA decided, without conferring with SDG&E, to use the indicative bid in its analysis but to tell SDG&E the expectation that the "open book" price should be capped by something like the indicative bid or the MPR. PA listened in on the first negotiation session between SDG&E and Sempra, at which SDG&E conveyed this condition. On that condition, PA believes it was appropriate to shortlist this bid.

SDG&E did not favor this affiliate bid, because PA conducted the LCBF evaluation, PA decided to evaluate the bid based on its indicative price, and SDG&E has conditioned the negotiation on the price cap. Because this is an affiliate bid (and because it has the highest ranking price on the short list) PA intends to continue to follow closely the negotiations with Sempra. SDG&E has stated that they will invite the IE to all negotiation sessions with the affiliate (as opposed to just providing regular reports on the negotiations).

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*

Soitec is a French manufacturer of concentrating solar photovoltaic technology, and Concentrix is a subsidiary of Soitec. Since January 2010, SDG&E has provided its Independent Evaluators with a weekly "status matrix" describing ongoing negotiations. PA first became aware of the Concentrix/Soitec bilateral proposal when it was reported in the "status matrix" for the week ending Dec. 10, 2010 (at that point only the first three projects were referenced). The Tierra del Sol and Rugged projects were added to the matrix as of April 29 although there was no substantive discussion of them until the May 13 matrix. SDG&E's contract negotiators began work on the contracts on Dec. 9, although Concentrix had previously met with SDG&E executives. The executives' interest was apparently due to Soitec's plan to build a manufacturing plant in the San Diego area for concentrating photovoltaic panels.

On Sept. 20, 2013, SDG&E informed the PRG that Soitec was negotiating a transfer of ownership of four projects (all but Desert Green), and that as a consequence the contracts would be transferred to the Imperial Valley. At the time, SDG&E and PA were involved with the negotiation of an amendment to the Tenaska West contract (also based on Soitec CPV technology) and PA did not devote much attention to the Soitec contracts until SDG&E and Soitec settled on a "tentative deal structure" in early November. PA followed the negotiation closely after that and participated in most of the conference calls or meetings between SDG&E and Soitec leading up to the final versions of Amendments 2 and 3.

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 reviewed several drafts of the contract (actually contracts, as there are five separate contracts that follow a similar form). Most of the changes to the contract language over that period were of the form of clarifications. The contract pricing, as originally reported in the status matrix and also as reported to SDG&E's PRG on Dec. 17, was [redacted] for Desert Green and LanWest, and [redacted] for the larger LanEast project. These prices were reduced by [redacted] over the course of the negotiation. The Tierra del Sol and Rugged contracts are for even larger projects (45MW and 80MW respectively), but except for project-specific information such as location, delivery point, performance assurance amounts, milestone dates and pricing [redacted], are identical to the first three.

Section 6.1 defines fairness as the absence of favoritism toward a bidder. Favoritism should be taken to imply undue preference not reasonably associated with particular value provided by the bidder. In the introduction to this Chapter we raised the possibility that SDG&E executives were particularly interested in these bids because of Soitec's plan to build a manufacturing facility in the SDG&E service area. The jobs associated with this facility provide some value to the local economy and hence to SDG&E ratepayers. SDG&E's attribution of such value, and its subsequent decision to negotiate with Soitec, is not an indicator of favoritism.

It is PA's opinion that these five contracts reflect fair negotiations.

The original Amendment discussed by SDG&E and Soitec was straightforward: Soitec would be allowed to move the projects to the Imperial Valley where they would use the interconnection agreement originally negotiated for the [redacted] The most significant initial issue was whether there would have to submetering to match the original four contracts while using a single CAISO interconnection/ SDG&E did not favor submetering. This issue was resolved in favor of SDG&E when Soitec reported that the four projects could be separately metered as distinct "cotenants" of the [redacted] LGIA.

SDG&E then became concerned about the justification for the contract and the nature of the amendment. SDG&E had entered into the PPAs in part to support the development of a Soitec factory in the San Diego factory. SDG&E was very concerned with the possibility that a party other than Soitec could gain control of the PPAs and build the plants with photovoltaic modules from another source. [redacted] SDG&E negotiated strenuously to obtain a commitment that the plants would be built with modules from the local Soitec factory. Ultimately the parties negotiated a Second Amendment to each contract – which PA understands is not being submitted for Commission approval – committing that each plant would be constructed from modules "manufactured or assembled [by Soitec] in San Diego County"; [redacted]

Each of the contracts (except Desert Green) is being amended by a Third Amendment, which is being submitted to the CPUC for approval, that will permit the subject project to be relocated to the Imperial Valley and interconnected to CAISO at the Imperial Valley substation as a "cotenant" of the Imperial Valley Solar LGIA.

6.3 TERMS AND CONDITIONS

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

The contract contains several conditions precedent:

- ϕϕι CPUC approval

- Interconnection timing and costs – there are actually three interconnection CPs, in a somewhat more elaborate form than in previous SDG&E RPS contracts. [redacted]
- A condition on the achievement of material governmental approvals
- A financing contingency
- A condition under which Concentrix/Soitec can terminate the contract if the panel manufacturing plant does not become operational by a specified date. Unlike a similar condition in the CSolar Imperial Valley West contract, there is no option for any of the projects to revert to conventional photovoltaic technology at a lower price.

Other differences from the model PPA distributed with the 2009 RFO are similar to clauses that have been included in other recent SDG&E RPS contracts.

[redacted] On balance, the contract terms appear reasonable.

The clauses of the Second Amendment that were most strenuously negotiated were noted in section 6.2: the local content clause requiring the project(s) be built with photovoltaic modules from the San Diego factory, and the fact that if the factory cannot deliver the modules, the developer is not given the option to use another source of supply.

The key clauses of the Third Amendment are:

- The limitation of network upgrade costs [redacted]

---

14 [redacted]

- The increase in contractual capacity factors from 29% to 32.4% (LanEast and LanWest) or 33% (Tierra Del Sol and Rugged), [redacted]
- The reduction or elimination of the payment for deliveries significant above the contractual capacity factor, which has also been inserted by SDG&E in other recent contracts, [redacted]
- The reduction in the contractual payment, if WREGIS fails to certify some of the energy produced as being renewable, to the extent the plant uses IID-supplied station power, [redacted]

The first and fourth of these benefit SDG&E, the second and third benefit Soitec.

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?"

In designing the first interconnection condition precedent, SDG&E effectively gave an estimate of the additional cost it could pay while keeping the contract within the 2009 shortlist range. This is similar to the information that SDG&E has provided in other recent negotiations such as for the [redacted]

This negotiation has a clear connection with the negotiation of the Amended and Restated Second Amendment to the Tenaska West contract, which was submitted to the Commission via Advice Letter 2487-E-A on November 8, 2013. In that contract SDG&E also sought to strengthen a developer's commitment to use panels from the Soitec San Diego factory. The difference between the two is that Tenaska West already had the contractual ability to build its project with 100% conventional panels, thanks to a financing condition precedent. SDG&E had much less leverage in that case and was unable to extract as strong a commitment as it was able to obtain in the Second Amendment to these contracts.

6.5 ADDITIONAL ISSUES

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

SDG&E originally filed these contracts Advice Letter 2270-E, dated July 14, 2011. [redacted]

On Sept. 9, SDG&E explained to PA that Soitec, as well as several other counterparties had been notified that their contracts were in danger of rejection; that the counterparties had been given an opportunity to refresh their offers in light of recent technology price decreases. SDG&E stated that they were not in a negotiating process, because they had already signed the contracts[15], but would entertain new offers, and indicated that offers could be improved through a combination of price reductions and acceleration of energy delivery.

On Sept. 19, 2011, SDG&E and Soitec executed an amendment to each of the five contracts. Each contract's price [redacted] The only other change was that each amendment more precisely defined the ambient conditions under which Contract Capacity would be measured. Thus the analysis in section 6.3 above is unaffected.

Although these contracts were executed well before the 2011 RFO, they had not been bid into the 2009 RFO. Therefore Soitec could not assert that they had demonstrated competitively that their pricing was at market. SDG&E did not show favoritism against this bidder, or treat them unfairly.

SDG&E and Soitec also negotiated an option under which SDG&E would be able at its sole option to call on Soitec to build [redacted] This option is discussed in section 7.1.3 below.

There are no additional issues associated with the Second or Third Amendments.

[15] SDG&E seemed to consider this a key point of contract law; PA is unable to judge if it is or not.

7. PROJECT-SPECIFIC RECOMMENDATION

The Second and Third amendments do not significantly change the economics of these contracts. They simply maintain what SDG&E and the CPUC had intended to achieve in the original contracts (as amended by the First Amendments): five power plant projects that would be built using concentrating photovoltaic modules produced in San Diego County. The Second Amendments reinforce that intent; the Third Amendments allow the contracts to be relocated, which is expected to increase their viability and the likelihood that the Soitec modules would be used. Although the Second Amendments are not being submitted for approval they are important in ensuring that the Third Amendments achieve SDG&E's and the CPUC's intents, and should be considered in deciding whether the approve the Third Amendments.

In approving the five contracts, including the First Amendments, the CPUC acknowledged PA's conclusion that the contracts were out of market,[16] but said they reasonable because they added the "potential for longterm technology diversity."[17] The costs of these projects have not changed significantly, and the option to move to the Imperial Valley, especially coupled with the potential involvement of a new equity investor, should make them more viable. Therefore PA recommends that unless the CPUC no longer sees the diversification (or economic development) value in these projects it should approve the Third Amendments.

These five projects stem from a proposal that Concentrix Solar submitted to SDG&E in October, 2010. That proposal stated, "The signed PPAs for this Project … will help Concentrix Solar to justify the construction of a proposed Solar CPV manufacturing facility in San Diego County." Part of the value of these contracts would be attributable to economic development associated with that manufacturing plant. The difficulty in assessing these contracts is attributable to the difficulty in quantifying that value, and the fact that these projects thus depend on the completion of the panel manufacturing plant.

PA is unable to estimate the "economic development" value of supporting the panel manufacturing facility; that is an issue of public policy. The contracts are priced competitively with the 2009 RFO shortlist, although of low viability, and a quantified "economic development" value would make at least the first three contracts clearly worth pursuing. The two larger ones might merit separate scrutiny if the Commission had time to do (SDG&E has indicated that it believes itself to be limited in the number of its advice letters the CPUC can process this year and has therefore submitted the contracts for combined analysis).

The October proposal gave reasonably good information about the LanWest, LanEast, and Desert Green projects. It described a smaller Rugged project – not under site control -- and did not mention Tierra del Sol. SDG&E has provided PA with an updated Soitec proposal, dated April 4, that offers four additional projects including the Rugged and Tierra del Sol projects whose contracts are reported on herein.

If there were no economic development value, then based on the original pricing and relative to the market as represented by the 2009 RPS RFO, the contracts' somewhat low viability

---

[16] This report, p. 7-9.

[17] California Public Utilities Commission, Resolution E-4439, November 10, 2011, p. 11.

would probably make it undesirable to invest SDG&E's RPS demand in them, although (for at least the first three contracts) their small size makes that less of a problem as it is unlikely other contracts would be crowded out. If the Commission takes the position that SDG&E procurement should be used to support a specific "green manufacturing facility" the first three contracts would merit approval, and probably also the last two.

The revised pricing makes the contracts more desirable relative to the 2009 shortlist. However, that revision is accompanied by (and reacts to) a general decline in bid prices for renewable generation as represented by the pricing in the 2011 RFO. While PA is somewhat skeptical that solar panels will be available at the prices developers expect when they actually get around to building their plants, those bids represent the best currently available market indicator.

Relative the 2011 RPS RFO, even the revised pricing for the Soitec contracts is out of the money. We have not been able to do a detailed valuation of the option contract that Soitec has offered but it probably adds [redacted] Altogether the contracts are [redacted] out of market (present value); if the CPUC believes that the value to the San Diego economy of a new panel manufacturing facility, plus the value of advancing CPV technology, are that large then it should approve the contracts.

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 Original pricing as submitted with AL 2270-E

PA reviewed the three Concentrix contracts using the same evaluation model that had been used for the 2009 Renewables RFO. Each contract allows for a range of capacity values – 3.5 to 6.5 MWac for the LanWest and Desert Green contracts, 12 to 22 MWac for LanEast, 35 to 45 MWac for Tierra del Sol and 60 to 80MWac for Rugged. Based on the Project Descriptions in the contracts, PA assumed intermediate capacity values for the first three and maximal 45 MW and 80MW capacities for the last two. Annual degradation [redacted] is specified in the contracts, and the assumed delivery profiles were based on pricing forms filled in by Concentrix.[18]

PA used the following assumptions and parameters:

	LanWest	*LanEast*	*Desert Green*	*Tierra del Sol*	*Rugged*
Capacity	5 MW	20 MW	5 MW	45 MW	80 MW
Online Date	2/28/2014	10/31/2014	2/28/2014	12/31/2014	12/31/2014
Contract term	25 years	25 years	25 years	25 years	25 years
Price	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Escalation	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOD Weighting	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Congestion cost	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Delivery point (substation)	Boulevard	Boulevard	Borrego Springs	ECO	Boulevard
Interconnection CP cost	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
RA credit	Local & system	Local & system	Local & system	Local & system	Local & system

* - In the other four cases, the congestion cost was the value used in the 2009 RFO analysis for contracts delivering at the given substation. There were no RFO bids at ECO and, because it will be on the Sunrise line between Boulevard and Imperial Valley, PA used the same adder as for Boulevard.

Table 1. Assumptions used in evaluating the Concentrix contracts

In the above table, "interconnection CP cost" is the cost threshold in the first interconnection condition precedent, which gives SDG&E the option to terminate the contract. All the locations are assumed to be credited with local as well as system RA (the CAISO's Local Capacity Reliability presentations seem to imply that all of San Diego County is in the local area). [redacted] The April updated proposal indicated that [redacted]

With these parameters and the 2009 Renewables RFO evaluation model, PA arrived at the following ranking prices. Each contract was ranked in two ways: first, using an estimated

[18] Pricing forms for Rugged and Tierra del Sol were supplied to PA by SDG&E and we assumed that, like the others, they came from Concentrix.

transmission upgrade based on the Transmission Ranking Cost Report (TRCR), consistent with the way shortlisted bids were evaluated in 2009[19]; and second, assuming the transmission upgrade cost was equal to (or just below) the value in the SDG&E interconnection CP. The ranking prices were:

	LanWest	*LanEast*	*Desert Green*	*Tierra del Sol*	*Rugged*
Using TRCR estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Using CP threshold	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 2. LCBF evaluation of the Concentrix/Soitec contracts

Using the TRCR estimates, all three ranking prices [redacted]

SDG&E computed its CP thresholds in order that the contracts would remain competitive with other recent contracts; SDG&E's assumptions may have been slightly different from PA's, explaining the higher ranking prices. However, the first bid not taken in 2009 was the [redacted]; that project has since been sold to [redacted] and offered to SDG&E as a bilateral proposal which SDG&E accepted [redacted] The next PPA bid was [redacted]

In summary, if TRCR estimates are used for transmission upgrade costs, as was done in the 2009 RFO, these five contracts are competitive with the 2009 shortlist. If the higher estimates based on the SDG&E interconnection conditions precedent are used, the five contracts are less favorable than the shortlist but still rank better than the PPA bids that have not been offered contracts.

7.1.2 Revised pricing

Because the revised pricing is lower than the original, the five contracts would score better under the 2009 LCBF model with the revised pricing than with the original pricing – from approximately [redacted] better (changes to the levelized cost do not translate directly to changes in the ranking price under the 2009 model, due to the duration equivalence adder). The contracts would be economic in that case.

Realistically, though, Soitec had been asked to refresh its pricing because of new information reflected in other bids, and in particular in bids to the 2011 RFO. Therefore, both PA and

---

[19] If the contracts are to be evaluated against the "market" as represented by the 2009 shortlist, the associated transmission costs must be estimated using the same method as was used in that RFO evaluation (the TRCR estimates). The TRCR did not provide estimated upgrade costs for projects interconnecting at Boulevard or ECO; based on the map in SDG&E's TRCR, the geographically closest cluster appeared to be SDGE-4, interconnected at the Cameron substation.

SDG&E evaluated the contracts using the LCBF model for the 2011 RFO. SDG&E apparently evaluated transmission upgrades using only the negotiated limits from the contracts. PA evaluated the contracts in two ways, based on TRCR upgrade cost estimates and using the negotiated limits. The TRCR estimates the only uniform set of estimates for all bids, that is, they come from the only estimation method that can be and has been applied to all bids in the RFO. Furthermore, CAISO cost estimates associated with recent studies have been questionable, because of the underlying assumption that all projects already on the queue will be built before a study group.

The following table gives the bid ranking prices for the revised bids, using the 2011 RFO model. The reader will note that these ranking prices are much lower than the ranking prices for the original price from the 2009 model; the reason is that the 2009 model was based on bid prices while the 2011 model is based on only the "above market" part of bid prices (price minus TOD-adjusted MPR):

	LanWest	*LanEast*	*Desert Green*	*Tierra del Sol*	*Rugged*
Using TRCR estimates	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Using CP threshold	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 3. LCBF evaluation of the revised Concentrix/Soitec pricing, using the 2011 model

These ranking prices appear quite competitive with the 2011 shortlist; the only project that would rank ahead of them are all quite short-term – a TREC ([redacted] two bilateral offers ([redacted], and the [redacted]. But the reason that these prices are so competitive is that they do not deliver until 2014. Because they have no Compliance Period 1 deliveries, they have no "Short Term / Long Term" (STLT) adder.

In the 2011 RFO, SDG&E prioritized its immediate need, because it already had a backlog of signed contracts delivering in Compliance Period 2 (including these five, although they had not yet been approved). After short-listing enough contracts delivering in Compliance Period 1 to meet RPS need through 2013, SDG&E had no further post-2014 need. And even there were post-2014 need, there were a large number of Compliance Period 2 bids with lower ranking prices than these bids (over 10 TWh of annual deliveries from projects with LCBF scores [redacted] Furthermore, of the shortlisted projects which deliver beyond 2014, all have ranking prices [redacted] if the STLT adder were disregarded, and all but two wind projects have ranking prices [redacted]. Therefore, PA believes if these projects had been bid into the 2011 RFO, even based on TRCR estimates, they would not have been competitive.

7.1.3 Option PPAs

SDG&E and Soitec also negotiated an option under which SDG&E would be able at its sole option to call on Soitec to build additional 50 MW CPV generating plants that would sell power to SDG&E [redacted]

[redacted] This option could be intended to provide additional value to SDG&E's ratepayers, or to demonstrate Soitec's conviction that once it can get its factory operating it will be able to produce concentrating PV modules that are cost-competitive with conventional PV.

PA has not done a detailed analysis of the value of this option. From a perusal of the 2011 RFO bids, it appears that while there are many solar PV bids whose levelized prices are [redacted], there are also quite a few priced [redacted]. It may be the case that those lower prices represent unjustified optimism; on the other hand we have no way to determine how much optimism is represented in Soitec's "strike price". While the option agreement itself gives SDG&E an unconditional call on up to 300 MW of PPAs at the given energy price, the option PPA itself contains a financing condition precedent that presumably would prevent the development of generating plants if, in 2015, they could not "pencil out" at those prices.

Even if the option is currently out of the money, the price of renewable power may increase between now and the option expiration date, so the value of the option should be slightly positive. But, without a good idea of (a) the volatility of renewable power prices and (b) the demand for new renewable power plants in 2016, it is hard to value the option. The demand is an important factor. SDG&E would only exercise the option if it needed the renewable power, or it could sell the power or associated RECs. In the 2011 RFO SDG&E viewed itself as not having significant compliance period 2 need, and it may have trouble getting approval from the CPUC of a PPA that amounts to a speculative purchase of renewable capacity for resale. For these reasons, PA views this option contract as having low value, at most [redacted] The option is for 300 MW of new capacity, and the five Soitec contracts add up to approximately half that, so the value added to these contracts by the option is probably [redacted]

7.1.4 Third Amendments

The Third Amendments to the LanWest, LanEast, Tierra Del Sol and Rugged contracts did not change their pricing. However, they do allow the contracts to be moved to the Imperial Valley, and Soitec provided generation profiles for the Imperial Valley that were significantly different from the previous profiles – the fraction of deliveries from the Rugged project represented by summer peak hours went [redacted] Total deliveries are also greater, thanks to the increase in capacity factor. On the other hand, the transmission upgrade costs [redacted] Those values and the new cost caps are shown in Table 4:

	LanWest	*LanEast*	*Tierra Del Sol*	*Rugged*
TRCR Estimate ($000)	[redacted]	[redacted]	[redacted]	[redacted]
CP Threshold ($000)	[redacted]	[redacted]	[redacted]	[redacted]
Amendment 3 Cost Cap ($000)	[redacted]	[redacted]	[redacted]	[redacted]

Table 4. Transmission Upgrade Cost Estimates

PA's evaluation of the relocated contracts, relative to the 2011 RFO, is displayed in Table 5 along with the previous values from Table 3:

	LanWest	LanEast	Tierra del Sol	Rugged
Using TRCR estimates	[redacted]	[redacted]	[redacted]	[redacted]
Using CP threshold	[redacted]	[redacted]	[redacted]	[redacted]
As amended	[redacted]	[redacted]	[redacted]	[redacted]
As amended, no "deliverability adder"	[redacted]	[redacted]	[redacted]	[redacted]

Table 5. LCBF evaluation of the Soitec Third Amendments, using the 2011 model, compared with previous estimation

The last line ("no deliverability adder") is included because there 2011 model did not assign local RA value to the Imperial Valley substation, while now it is assumed that generators connected at that location will receive local RA value. Comparing the fourth and first lines of Table 5, it is clear that the economics of the contracts have not changed.

An additional RPS RFO was completed in 2013. [redacted] and the shortlist was reported to the CPUC Energy Division on May 8, 2013. The associated advice letter 2488-E, and the Independent Evaluator report, were filed June 7. PA evaluated the amended contracts using the 2013 evaluation model (but assuming the projects would be paid flat pricing, as in the contract). Results are given in Table 6:

	LanWest	LanEast	Tierra del Sol	Rugged
Net Market Value	[redacted]	[redacted]	[redacted]	[redacted]

Table 6. Evaluation of the Soitec Third Amendments, using the 2013 model

These values should not be directly compared with the values in Table 5 as they come from a different model. They can be compared with the net market values of the (contingently) shortlisted projects from the 2013 RFO, and other high-scoring proposals. [redacted] Therefore the amended Soitec contracts appear to be well out of market.

7.1.5 Project Viability Calculator

When Concentrix submitted its proposal to SDG&E, it included a generic Project Viability Calculator (covering all its proposed sites) indicating a score of 74.12. PA rescored the five projects, distinguishing them by the location of their transmission interconnections and other site-specific information provided:

Project Scoring range 0 - 10	LanWest	LanEast	Desert Green	Tierra del Sol	Rugged
Company / Development Team	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Project Development Experience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Ownership / O&M Experience	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Categor	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Criteri	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Normalized Categor	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Categor	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Technology	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Technical Feasibility	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Resource Quality	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Manufacturing Supply Chain	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Criteria	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Normalized Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Development Milestones	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Site Control	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Permitting Status	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Project Financing Status	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Interconnection Progress	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Transmission Requirements	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Reasonableness of COD	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Criteria	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Normalized Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Weighted Category	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Weighted Scor	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Figure 2. PA's Project Viability Calculator scoring

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Our largest concern with all five Concentrix/Soitec contracts' viability – more precisely, with the possibility that the projects will not be completed, even if they are "viable" – is related to one of the attractions of the projects to SDG&E, namely their connection with the proposed panel manufacturing facility. The viability of these contracts depends on the viability of that facility, which we cannot judge but which accounts for the Manufacturing Supply Chain score. But Soitec's interest in the project may be as an outlet for the output of the manufacturing facility; if enough other CPV projects go forward, this project may not be allocated output. Presumably most of those other projects would be in SDG&E service area but one cannot be sure and in any case the forecasted contribution of this project to SDG&E's RPS targets should be subject to some appropriate discounting.

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."

7.2.1 Original recommendation

The five contracts appear to be well-priced relative to the shortlist from the 2009 RFO, based on the TRCR transmission upgrade cost estimates. If transmission upgrade costs approach the levels at which SDG&E could terminate the contracts, they may be more expensive than the shortlisted projects (although those projects' costs would probably increase too). On the other hand, the five projects are risky, either if Soitec's panel manufacturing facility fails or if it succeeds greatly (output oversubscribed). This risk, as well as the slightly elevated costs associated with high transmission upgrade costs, may be offset by the "economic development" value of supporting the panel manufacturing facility.

PA is unable to estimate the "economic development" value of supporting the panel manufacturing facility; that is an issue of public policy. If that value could be quantified at, say, $2/MWh, then these contracts would be worth pursuing. If there were no economic development value, then the contracts' low viability would probably make it undesirable to invest SDG&E's RPS demand in them, although the small size of the firs three contracts makes that less of a problem (it is unlikely other contracts would be crowded out). Unless the Commission takes the position that SDG&E procurement should not be used to support a specific "green manufacturing facility" the LanEast, LanWest and Desert Green contracts would merit approval, and the Rugged and Tierra del Sol contracts probably so.

7.2.2 Recommendation relative to the revised contracts

The standard of value for PA's original recommendation was the pricing of contracts that were shortlisted in the 2009 RPS RFO. PA has used this kind of standard consistently in valuing bilateral contracts, reasoning that an RFO represents the most reliable available market intelligence. By that standard the price reduction on these contracts has made them more desirable, and PA would make a stronger positive recommendation than before. In particular PA would no longer feel it necessary to appeal to potential "economic development" benefits after this price reduction.

Still, there has been a significant time lag between RFOs. It is reasonable to consider that the 2009 RFO no longer provides a standard, now that the 2011 RFO has concluded – even though these contracts were executed and submitted for approval prior to the 2011 RFO. If they had come through an RFO one might consider that they have a prior claim of reasonableness on that basis; but they were submitted bilaterally over a year before the 2010 RFO.

Prior to the 2011 RFO, there was no good source of market information for renewable generation contracts in San Diego and Imperial Counties; now we have the 2011 bids and results available, and at least anecdotal evidence that the Commission considers them a reasonable market standard for bilateral contracts. Under that standard, the Soitec contracts are out of the money. There are three possible reasons for approving them anyway:

1. Because they were submitted before the 2010 RFO and qualified under the standard current at the time
2. Because the option contract provides extra value
3. To support the development of new renewable technology
4. Because of the "economic development" value of the new factory (which may actually have increased as the economy has failed to recover).

The first reason is probably not sufficient, and PA does not consider the option contract to provide enough value to justify these contracts. While PA supports the development of new technology in general, the value of that technology (as well as the "economic development" value of supporting the panel manufacturing facility) cannot be precisely estimated.

PA believes that at this pricing and relative to the 2011 RFO the Soitec contracts are between [redacted] out of the money. Over the 25-year term of the three contracts, the present value of the "above market" cost of the contracts is [redacted]. "Above market" here means above a market price for RPS contracts, not above the MPR. The Commission should approve the contracts if the value of supporting the development of CPV, added to the economic benefit of the new panel manufacturing plant, is more [redacted] and consider approving them if that value [redacted]

7.2.3 Recommendation relative to the Third Amendments

In approving the five contracts, including the First Amendments, the CPUC acknowledged PA's conclusion that the contracts were out of market, but said they reasonable because they added the "potential for longterm technology diversity." The costs of these projects have not changed significantly, and the option to move to the Imperial Valley, especially coupled with the potential involvement of a new equity investor, should make them more viable.

Therefore PA recommends that unless the CPUC no longer sees the diversification (or economic development) value in these projects it should approve the Third Amendments.

7.3 ADDITIONAL ISSUES

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

PA has nothing else to add to this chapter.