

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4125  
May 29, 2008

R E D A C T E D

R E S O L U T I O N

Resolution E-4125. Southern California Edison Company requests approval of four renewable portfolio standard power purchase agreements with Baja Wind US LLC (Baja Wind), Granite Wind, LLC (Granite Wind), California Sunrise I: Alternative Energy Development LLC (California Sunrise), and County Sanitation Districts of Los Angeles County (LACSD). The California Sunrise and LACSD contracts are approved without modifications. The Commission defers judgment on the Baja Wind and Granite Wind contracts.

By Advice Letter (AL) 2143-E filed on July 27, 2007, AL 2143-E-A filed on August 16, 2007 and AL 2143-E-B filed on January 22, 2008.

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SUMMARY

**Southern California Edison's (SCE) California Sunrise and LACSD contracts comply with the Renewable Portfolio Standard (RPS) procurement guidelines and are approved**

SCE filed advice letter (AL) 2143-E on July 27, 2007 requesting Commission review and approval of four renewable energy power purchase agreements (PPAs) executed with Baja Wind US LLC, Granite Wind LLC, California Sunrise I: Alternative Energy Development LLC (California Sunrise), and County Sanitation Districts of Los Angeles County (LACSD). SCE filed two supplemental advice letters to supplement AL 2143-E in part in order to include the Independent Evaluation Report for SCE's 2006 renewable resource solicitation and to amend the four contracts to comply with D.07-11-025<sup>1</sup>. Without prejudice the Commission defers judgment on the Baja Wind and Granite Wind contracts at this time. These contracts will be addressed in a subsequent resolution(s).

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<sup>1</sup> Commission Decision (D.) 07-11-025, Opinion on Amended Petition for Modification of Decision 04-06-014 Regarding Standard Terms and Conditions, issued November 19, 2007

Generating facility	Type	Term Years	Initial Capacity (MW)	GWh Energy	Expected Online Date	Location
California Sunrise I	Solar photovoltaic, new	20	0.99	2.3	December 31, 2008	Kern County, CA
LACSD, Palos Verdes	Landfill gas, new	10	1.6 <sup>2</sup>	12.6	December 31, 2009	Rolling Hills Estates, CA

California Sunrise I will be a new 1-megawatt (MW) solar photovoltaic facility jointly developed by California Sunrise and the Clear Skies Group. The LACSD project, a new gas-to-energy facility located at the Palos Verdes landfill, will replace an existing steam power plant and landfill gas flare with microturbines, a fuel cell and ultra low emission flare. The new facility will be more efficient in converting low BTU landfill gas into electric energy and will result in lower overall emissions.

Deliveries from these PPAs are reasonably priced, and the contract prices are fully recoverable in rates over the life of the contracts, subject to Commission review of SCE's administration of the contracts. The California Sunrise and LACSD contract prices are above the 2006 MPR and will be applied toward SCE's cost limitation.<sup>3</sup> The necessary above-MPR costs of the contract are de minimis.

**Confidential information about the contract should remain confidential**

This resolution finds that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583, General Order (G.O.) 66-C, and D.06-06-066 should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

**BACKGROUND**

**The RPS Program requires each utility to increase the amount of renewable energy in its portfolio**

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<sup>2</sup> The fuel source will decline over time, so the contract decreases to 1.3 MW over the life of the contract.

<sup>3</sup> SB 1036 (Chapter 685, Statutes of 2007), effective January 1, 2008, gives the CPUC the authority to approve RPS contract prices that are reasonable and above the market price referent. Public Utilities Code § 399.15 (d) sets a "limitation on the total costs expended above the market prices" for each electrical corporation.

The California RPS Program was established by Senate Bill 1078, effective January 1, 2003. It requires that a retail seller of electricity such as SCE purchase a certain percentage of electricity generated by Eligible Renewable Energy Resources (ERR). The RPS program is set out at Public Utilities Code Section 399.11, et seq. Each utility is required to increase its total procurement of ERRs by at least 1% of annual retail sales per year so that 20% of its retail sales are supplied by ERRs by 2017.

The State's Energy Action Plan (EAP) called for acceleration of this RPS goal to reach 20 percent by 2010. This was reiterated again in the Order Instituting Rulemaking (R.04-04-026) issued on April 28, 2004<sup>4</sup>, which encouraged the utilities to procure cost-effective renewable generation in excess of their RPS annual procurement targets<sup>5</sup> (APTs), in order to make progress towards the goal expressed in the EAP.<sup>6</sup> On September 26, 2006, Governor Schwarzenegger signed Senate Bill 1077, which officially accelerated the State's RPS targets to 20 percent by 2010.

### **CPUC has established procurement guidelines for the RPS Program**

In response to SB 1078, the Commission has issued a series of decisions that establish the regulatory and transactional parameters of the utility renewables procurement program. On June 19, 2003, the Commission issued its "Order Initiating Implementation of the Senate Bill 1078 Renewable Portfolio Standard Program," D.03-06-071<sup>8</sup>. Instructions for utility evaluation (known as 'least-cost, best-fit') of each offer to sell products requested in a RPS solicitation were provided in D.04-07-029.<sup>9</sup> The Commission adopted Standard Terms and Conditions for RPS power purchase agreements in D.04-06-014 as required by Public Utilities Code Section 399.14(a)(2)(D). In addition, D.06-10-050, as modified by D.07-03-046, refined the RPS reporting and compliance methodologies.<sup>10</sup> In this decision, the Commission established methodologies to

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<sup>4</sup> [http://www.cpuc.ca.gov/Published/Final\\_decision/36206.htm](http://www.cpuc.ca.gov/Published/Final_decision/36206.htm)

<sup>5</sup> APT - An LSE's APT for a given year is the amount of renewable generation an LSE must procure in order to meet the statutory requirement that it increase its total eligible renewable procurement by at least 1% of retail sales per year.

<sup>6</sup> Most recently reaffirmed in D.06-05-039

<sup>7</sup> SB 107, Chapter 464, Statutes of 2006

<sup>8</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/27360.PDF](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/27360.PDF)

<sup>9</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/38287.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/38287.PDF)

<sup>10</sup> D.06-10-050, Attachment A, [http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/61025.PDF](http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/61025.PDF)) as modified by D.07-03-046 ([http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/65833.PDF](http://www.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/65833.PDF)).

calculate an LSE's initial baseline procurement amount, annual procurement target (APT) and incremental procurement amount (IPT).<sup>11</sup>

On June 9, 2004, the Commission adopted its market price referent (MPR) methodology<sup>12</sup> for determining the Utility's share of the RPS seller's bid price (the contract payments at or below the MPR), as defined in Public Utilities Code Sections 399.14(a)(2)(A) and 399.15(c). On December 15, 2005, the Commission adopted D.05-12-042 which refined the MPR methodology for the 2005 RPS Solicitation.<sup>13</sup> Subsequent resolutions adopted MPR values for the 2005, 2006 and 2007 RPS Solicitations.<sup>14</sup>

In addition, the Commission has implemented Pub. Util. Code 399.14(b)(2), which states that before the Commission can approve an RPS contract of less than ten years' duration, the Commission must establish "for each retail seller, minimum quantities of eligible renewable energy resources to be procured either through contracts of at least 10 years' duration (long-term contracts) or from new facilities commencing commercial operations on or after January 1, 2005." On May 3, 2007, the Commission approved D.07-05-028, which established a minimum percentage of the prior year's retail sales (0.25%) that must be procured with contracts of at least 10 years' duration or from new facilities in order for short-term contracts to be used towards RPS compliance.

### **Commission requires certain terms and conditions in all RPS power purchase agreements**

On June 9, 2004, the Commission adopted Standard Terms and Conditions (STCs) for RPS power purchase agreements as required by Pub. Util. Code Section 399.14(a)(2)(D). Of the fourteen STCs adopted in D.04-06-014, the Commission specified five that could be modified by parties, and nine that may not be modified or only modified in part. Two parties jointly filed a petition for modification on this decision, and subsequently an amended petition for

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<sup>11</sup> The IPT represents the amount of RPS-eligible procurement that the LSE must purchase, in a given year, over and above the total amount the LSE was required to procure in the prior year. An LSE's IPT equals at least 1% of the previous year's total retail electrical sales, including power sold to a utility's customers from its DWR contracts.

<sup>12</sup> D.04-06-015; [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/37383.pdf](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/37383.pdf)

<sup>13</sup> [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/52178.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_DECISION/52178.pdf)

<sup>14</sup> Respectively, Resolution E-3980: [http://www.cpuc.ca.gov/WORD\\_PDF/FINAL\\_RESOLUTION/55465.DOC](http://www.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/55465.DOC), Resolution E-4049: [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_RESOLUTION/63132.doc](http://www.cpuc.ca.gov/word_pdf/FINAL_RESOLUTION/63132.doc), Resolution E-4110: [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_RESOLUTION/73594.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_RESOLUTION/73594.pdf)

modification. The Commission granted relief in substantial part in D.07-11-025, the “Opinion on Amended Petition for Modification of Decision 04-06-014 Regarding Standard Terms and Conditions”.<sup>15</sup>

As a result of the D.07-11-025, the non-modifiable terms and conditions that must be in every RPS power purchase agreement include: CPUC Approval, RECs and Green Attributes, Eligibility and Applicable Law. The Commission also required that pending advice letters with contracts which have not yet been approved or rejected should be amended to comply with D.07-11-025. Most recently, the Commission compiled the most updated STCs in D.08-04-009, and excluded the supplemental energy payments term. As a result, there are now thirteen STCs of which four are nonmodifiable.

**Pursuant to SB 1036, above-MPR costs can now be recovered in rates**

Pursuant to SB 1078 and SB 107, the California Energy Commission (CEC) was authorized to “allocate and award supplemental energy payments” to cover above-market costs<sup>16</sup> of long-term RPS-eligible contracts executed through a competitive solicitation.<sup>17</sup> The statute required that developers seeking above-market costs apply to the CEC for supplemental energy payments (SEPs).

The mechanism for awarding above-market costs to eligible renewable energy contracts negotiated through a competitive solicitation was modified by SB 1036, which became effective on January 1, 2008.<sup>18</sup> SB 1036 authorizes the CPUC to provide above-MPR cost recovery through electric retail rates for contracts that are deemed reasonable. Above-MPR cost recovery has a ‘cost limitation’ equal to the amount of funds currently accrued in the CEC’s New Renewable Resources Account, which had been established to collect SEP funds, plus the portion of funds that would have been collected through January 1, 2012. In addition, pursuant to SB 1036, Pub. Util. Code § 399.15(d)(2) provides that:

“The above-market costs of a contract selected by an electrical corporation may be counted toward the cost limitation if all of the following conditions are satisfied:

(A) The contract has been approved by the commission and was selected through a competitive solicitation pursuant to the requirements of subdivision(d) of Section 399.14.

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<sup>15</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/75354.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/75354.PDF)

<sup>16</sup> “Above-market costs” refers to the portion of the contract price that is greater than the appropriate market price referent (MPR).

<sup>17</sup> Pub. Util. Code 399.15(d)

<sup>18</sup> Chapter 685, Statutes of 2007 (SB 1036)

- (B) The contract covers a duration of no less than 10 years.
- (C) The contracted project is a new or repowered facility commencing commercial operations on or after January 1, 2005.
- (D) No purchases of renewable energy credits may be eligible for consideration as an above-market cost.
- (E) The above-market costs of a contract do not include any indirect expenses including imbalance energy charges, sale of excess energy, decreased generation from existing resources, or transmission upgrades.”

The CEC and CPUC are currently working collaboratively to implement SB 1036, which has an effective date of January 1, 2008.

### **SCE requests approval of four renewable energy contracts**

On July 27, 2007, SCE filed Advice Letter (AL) 2143-E requesting Commission approval of four renewable power procurement contracts. On August 16, SCE filed AL 2143-E-A to supplement, in part, AL 2143-E in order to include the Independent Evaluation Report for SCE’s 2006 renewable resource solicitation. On January 22, 2008, filed AL 2143-E-B to supplement, in part, AL 2143-E and AL 2143-E-A in order to comply with D.07-11-025, “Opinion on Amended Petition for Modification of Decision 04-06-014 Regarding Standard Terms and Conditions”, adopted on November 19, 2007.

The Baja Wind, Granite Wind, California Sunrise and LACSD PPAs result from SCE’s 2006 solicitation for renewable bids, which was authorized by D.06-05-039. The Commission’s approval of the PPAs will authorize SCE to accept future deliveries of incremental supplies of renewable resources and contribute towards the renewable energy procurement goals required by California’s RPS statute.<sup>19</sup> In total, procurement from the proposed projects is expected to contribute approximately 500 GWh towards SCE’s APT in 2010.

### **The Baja Wind and Granite Wind contracts will be evaluated separately**

In AL 2143-E, SCE requests approval of four new renewable energy contracts: Baja Wind, Granite Wind, California Sunrise and LACSD. The Commission has decided to address these four contracts in separate resolutions both because the Baja Wind contract was protested and because the Commission requires additional information to evaluate both large wind projects. Resolution E-4125

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<sup>19</sup> California Public Utilities Code section 399.11 et seq., as interpreted by D.03-07-061, the “Order Initiating Implementation of the Senate Bill 1078 Renewables Portfolio Standard Program”, and subsequent CPUC decisions in Rulemaking (R.) 04-04-026.

addresses the California Sunrise and LACSD contracts, both of which are small (under 2 MWs) renewable projects that will interconnect to SCE's distribution system and that can commence operations on a relatively short timeframe (before 2010). A future resolution or resolutions will address the Baja Wind and Granite Wind contracts. Both are utility-scale wind contracts (200-250 MWs and 42-81 MWs, respectively) that will likely require significant transmission upgrades and longer project development lead times.

### **SCE requests "Final CPUC Approval" of PPAs**

SCE requests a Commission resolution containing the following findings in order to satisfy the "CPUC Approval" terms in the California Sunrise and LACSD Agreements:

1. Approval of the ... California Sunrise and LACSD Contracts in their entirety;
2. Approval of the modification of certain terms and condition in the ... California Sunrise and LACSD Contracts that are provided for in D.04-06-014;<sup>20</sup>
3. A finding that any electric energy sold or dedicated to SCE pursuant to the ... California Sunrise and LACSD Contracts constitutes procurement by SCE from an eligible renewable energy resource ("ERR") for the purpose of determining SCE's compliance with any obligation that it may have to procure from ERRs pursuant to the RPS Legislation or other applicable law concerning the procurement of electric energy from renewable energy resources;
4. A finding that all procurement under the ... California Sunrise and LACSD Contracts counts, in full and without condition, towards any annual procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
5. A finding that all procurement under the ... California Sunrise and LACSD Contracts counts, in full and without condition, towards any incremental procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
6. A finding that all procurement under the ... California Sunrise and LACSD Contracts counts, in full and without condition, towards the requirement in the RPS Legislation that SCE procure 20 percent (or such

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<sup>20</sup> SCE requested this list of findings in Al 2143-E. Subsequently, SCE has modified the contract terms and conditions to comply with D.07-11-025, the "Opinion on Amended Petition for Modification of Decision 04-06-014 Regarding Standard Terms and Conditions".

- other percentage as may be established by law) of its retail sales from ERRs by 2010 (or such other date as may be established by law);
7. A finding that the ... California Sunrise and LACSD Contracts, and SCE's entry into these PPAs, is reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to the PPAs, subject only to further review with respect to the reasonableness of SCE's administration of the PPAs;<sup>21</sup> and
  8. Any other and further relief as the Commission finds just and reasonable.

### **SCE's Procurement Review Group participated in review of the contracts**

In D.02-08-071, the Commission required each utility to establish a "Procurement Review Group" (PRG) whose members, subject to an appropriate non-disclosure agreement, would have the right to consult with the utilities and review the details of:

1. Overall transitional procurement strategy;
2. Proposed procurement processes including, but not limited to, RFO; and
3. Proposed procurement contracts before any of the contracts are submitted to the Commission for expedited review

SCE's PRG was formed on or around September 10, 2002. Current participants include representatives from the Commission's Energy Division, the Division of Ratepayer Advocates, The Utility Reform Network, the Natural Resources Defense Council, the Consumers' Union, California Utility Employees, and the California Department of Water Resources.

SCE asserts that its PRG was consulted during each step of the renewable procurement process. Among other things, SCE informed the PRG of the initial results of its request for proposals ("RFP"); explained the evaluation process; and updated the PRG periodically concerning the status of contract formation. On November 15, 2006, SCE advised the PRG of its proposed short list of bids for its 2006 RPS solicitation. On March 13, 2007, SCE updated the PRG as to the status of negotiations with bidders into the solicitation. On June 27, 2007, SCE briefed the PRG concerning the successful conclusion of discussions with California Sunrise and LACSD.

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<sup>21</sup> In AL 2143, SCE states, "As provided in the ... California Sunrise and LACSD Contracts, SCE is requesting authorization to recover in rates payments made pursuant to those PPAs up to the appropriate MPRs. California Sunrise and LACSD intend to seek SEPs to cover all payments above the appropriate MPRs."

Although Energy Division is a member of the PRG, it reserved its conclusions for review and recommendation on the PPA to the advice letter process.

### NOTICE

Notice of AL 2143-E, AL 2143-E-A and AL 2143-E-B were made by publication in the Commission's Daily Calendar. Southern California Edison states that a copy of the Advice Letter and Supplemental Advice Letters were mailed and distributed in accordance with Section III-G of General Order 96-A.

### PROTESTS

On January 29, 2008, the Center for Biological Diversity (CBD) and the Sierra Club jointly filed a late protest and comment letter to the Baja Wind contract described in AL 2143-E, AL 2143-E-A and AL 2143-E-B. However, neither the California Sunrise nor LACSD contracts were protested.

### DISCUSSION

#### **Description of the projects**

The following table summarizes the substantive features of the PPAs. See Confidential Appendix C for a detailed discussion of contract prices, terms, and conditions:

<b>Generating facility</b>	<b>Type</b>	<b>Term Years</b>	<b>Initial Capacity (MW)</b>	<b>GWh Energy</b>	<b>Expected Online Date</b>	<b>Location</b>
California Sunrise I	Solar photovoltaic (PV), new	20	0.99	2.3	December 31, 2008	Kern County, CA
LACSD, Palos Verdes	Landfill gas, new	10	1.6 <sup>22</sup>	12.6	December 31, 2009	Rolling Hills Estates, CA

The California Sunrise project represents the first solar PV facility that SCE has shortlisted in an RPS solicitation. Only one other RPS contract with a PV facility has been approved by the Commission.<sup>23</sup> The development of the California Sunrise project, which will deliver all of its output to the grid, will support the advancement and commercialization of utility-scale wholesale PV technology,

<sup>22</sup> The fuel source will decline over time, so the contract decreases to 1.3 MW over the life of the contract.

<sup>23</sup> Resolution E-4132 (December 20, 2007).

[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_RESOLUTION/77039.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/77039.PDF)

which may lead to future cost reductions for this technology. The LACSD project will install new microturbines, a fuel cell and an ultra low emissions flare at the Palos Verdes landfill, which will replace an existing steam turbine, and will enable the facility to continue generating renewable power from an aging landfill. Approval of these projects is consistent with the State's objective of supporting renewable technologies, and will ensure California continues to increase its supply of least-cost best-fit renewable resources.

**Energy Division examined the contracts on multiple grounds:**

- PPAs are consistent with SCE's CPUC adopted 2006 RPS Plan and were executed through a competitive solicitation
- SCE's Bid evaluation process is consistent with CPUC's least-cost best-fit (LCBF) decision
- PPAs conform to CPUC adopted Standard Terms and Conditions
- The projects are viable
- The contract prices are reasonable and the contracts are eligible to be counted towards SCE's cost limitation for above-market contracts.

**The PPAs are consistent with SCE's CPUC adopted 2006 RPS Plan**

California's RPS statute requires the Commission to review the results of a renewable energy resource solicitation submitted for approval by a utility.<sup>24</sup> The Commission will then accept or reject proposed PPAs based on their consistency with the utility's approved renewable procurement plan (Plan). SCE's 2006 Plan includes an assessment of supply and demand for renewable energy and bid solicitation materials, including a pro-forma agreement and bid evaluation methodology documents. The Commission conditionally approved SCE's 2006 RPS procurement plan, including its bid solicitation materials, in D.06-05-039.

As ordered by D.06-05-039, on June 9, 2006 SCE filed and served its amended 2006 Plan. After the Director of the Energy Division temporarily suspended SCE's 2006 RPS solicitation and authorized SCE to further amend its 2006 Plan and 2006 RFP, SCE filed an amended 2006 RPS procurement plan and amended 2006 RFP protocol. In the amended 2006 Plan, SCE made the necessary changes that were required and/or suggested by D.06-05-039. The Proposed PPAs are consistent with SCE's Commission-approved RPS Plan.<sup>25</sup>

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<sup>24</sup> Pub. Util. Code, Section §399.14

<sup>25</sup> Modifications to SCE's pro-forma contract terms and conditions were required to comply with D.07-11-025.

PPAs fit with identified renewable resource needs

SCE's 2006 RPS Plan called for SCE to issue competitive solicitations for electric energy generated by eligible renewable resources from either existing or new generating facilities that would deliver in the near term or long term. SCE also considered any new or repowered facilities that operate on co-fired fuels or a mix of fuels that include fossil fuel hybrid. SCE's 2006 request for proposals (RFP) solicited proposals for projects that would supply electric energy, environmental attributes, capacity attributes and resource adequacy benefits from eligible renewable energy resources. SCE requested proposals based upon standard term lengths of 10, 15 or 20 years with a minimum capacity of 1 MW. SCE indicated a preference to take delivery of the electric energy at SP-15, but considered proposals based upon any designated delivery point within California. Additionally, SCE solicited for contracts that were located either within California, or if outside California, have the first point of interconnection in the WECC transmission system and have access to a transmission pathway capable of delivering the energy to a location within California.

Both of the proposed projects fit SCE's identified renewable resource needs. Both facilities are expected to commence deliveries by the end of 2010 and will have their first point of interconnection within California.

PPA selections consistent with RPS Solicitation Protocol

SCE distributed an RFP package that included a procurement protocol, which set forth the terms and conditions of the RFP, requirements for proposals, selection procedures, approval procedures and the RFP schedule. As part of the bid submission, SCE required bidders to submit comments on SCE's *pro forma* agreement, to execute non-disclosure agreements and to send a letter stating that the bidder agrees to be bound by the terms and conditions of the protocol. The protocol also requested that proposals contain complete, accurate, and timely information about the project's supplier, generating facility, and commercial terms and the pricing details of the proposal.

Consistent with D.06-05-039, SCE retained an independent evaluator (IE) to report to SCE's procurement review group about the 2006 RPS solicitation and to ensure that the solicitation was conducted fairly and that the best resources were acquired. According to the IE Report submitted as part of AL 2143-E-A, the IE performed his duties overseeing the 2006 solicitation and has provided assessment reports to the PRG and the CPUC.

SCE says that all proposed agreements were solicited, negotiated and executed in a manner consistent with SCE's 2006 RFP Protocol. All bids offered power from eligible renewable energy resources, submitted the standard forms, agreed to be bound by the protocol and signed a non-disclosure agreement.

**Bid evaluation process consistent with Least-Cost Best Fit (LCBF) decision**

The CPUC’s LCBF decision<sup>26</sup> directs the utilities to use certain criteria in their bid ranking. It offers guidance regarding the process by which the utility ranks bids in order to select or “shortlist” the bids with which it will commence serious negotiations.

SCE’s LCBF bid review process used for its 2006 solicitation is in compliance with the applicable Commission decisions. SCE’s LCBF analysis evaluates both quantitative and qualitative aspects of each proposal to estimate its value to SCE’s customers and relative value in comparison to other proposals.

Quantitative Assessment

SCE quantitatively evaluates bids based on individual benefit-to-cost (B-C) ratios. It is this B-C ratio that is used to rank and compare each project. The B-C ratios measure total benefits divided by total costs according to the following equation:

$$\text{B-C Ratio} = \frac{\text{Capacity Benefit} + \text{Energy Benefit}}{\text{Payments} + \text{Integration Cost} + \text{Transmission Cost} + \text{Debt Equivalence}}$$

The capacity benefits are assigned based on SCE’s forecast of capacity value and a technology-specific effective load carrying capability (ELCC). SCE evaluates the project energy benefits using a production simulation model that compares the total production costs of SCE’s base resource portfolio with the total production costs of the portfolio including the proposed RPS project. This calculation takes into account forecasted congestion charges, dispatchability and curtailability. This modeling methodology evaluates the impact of portfolio fit for all projects.

The market valuation of each project includes an assessment of the payments, an all-in price for delivered energy adjusted in each time-of-delivery period, and integration costs. By Commission policy (D.04-07-029 and clarified by D.07-02-011), integration cost adders for all proposals must be zero. Further, the transmission upgrade costs are estimated using SCE’s transmission ranking cost report for resources that do not have an existing interconnection to the electric system or a completed Facilities Study.

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<sup>26</sup> D.04-07-029

The benefit-to-cost ratios for both the California Sunrise and LACSD projects were favorable in comparison to the bids in SCE's 2006 solicitations. See Confidential Appendix A for more detailed bid comparisons.

### **Independent evaluator (IE) oversaw SCE's RPS procurement process**

Consistent with D.06-05-039, SCE retained an independent evaluator (IE), Sedway Consulting, to report to SCE's procurement review group about the 2006 RPS solicitation and to ensure that the solicitation was conducted fairly and that the best resources were acquired. According to the IE Report submitted in AL 2143-E-A, Sedway Consulting performed its duties overseeing the 2006 solicitation and has provided assessment reports to the PRG and the CPUC.

In its Independent Evaluator Report, Sedway Consulting concluded that SCE "conducted a fair and effective evaluation of the proposals that it received in response to its 2006 RPS RFP and made the correct selection decisions in its short list." Sedway Consulting performed its own evaluation of all 2006 proposals using a model developed to simulate SCE's LCBF ranking results. The IE ranked all proposals using its model and compared the results to SCE's bid ranking results. The IE's ranking results were similar to SCE's, and as a result, Sedway Consulting agreed with SCE's shortlisting decisions. In addition, the IE monitored SCE's shortlisting discussions, contract negotiations and meetings with management where SCE made decisions, for example, regarding bid prioritizations and negotiation positions. Overall, the IE concludes that SCE conducted a fair and effective evaluation of its 2006 renewable energy proposals.

For the IE's contract-specific evaluations, see Confidential Appendix E.

### **Consistency with adopted Standard Terms and Conditions**

In D.04-06-014, the Commission set forth standard terms and conditions (STCs) to be incorporated into RPS agreements. Appendix A of that decision identified nine of the fourteen STCs as "may not be modified." On November 19, 2007, after the filing of AL 2143-E, the Commission decided to grant, in part, an amended petition for modification of D.04-06-014. This decision, D.07-11-025, which granted in part the petition for modification, stated that all renewable power purchase agreements must contain four non-modifiable standard terms and conditions. D.07-11-025 also required that electrical corporations, such as SCE, file amendments to any pending advice letters for renewable PPAs in order to comply with the decision.

SCE filed AL 2143-E-B to supplement, in part, terms and conditions in the Baja Wind, Granite Wind, California Sunrise and LACSD Agreements. As a result, the STCs for all four PPAs are in compliance with D.07-11-025.

**Contracts are consistent with SB 1036 requirements and will count towards SCE's cost limitation**

SB 1036, effective January 1, 2008 set forth five conditions, codified in Pub. Util. Code § 399.15(d)(2), for contracts to be counted toward the cost limitation. Both the California Sunrise and LACSD contracts satisfy the conditions:

- California Sunrise and LACSD were selected through SCE's 2006 competitive solicitation; the contracts are consistent with SCE's approved procurement plan,
- California Sunrise and LACSD contracts are at least 10 years in duration,
- California Sunrise and LACSD are new facilities,
- Neither California Sunrise or LACSD is a contract for unbundled renewable energy credits, and
- SCE asserts that neither the California Sunrise nor LACSD contracts include any indirect expenses including imbalance energy charges, sale of excess energy, decreased generation from existing resources, or transmission upgrades.

The CPUC issued Draft Resolution E-4160 on March 12, 2008, which proposes additional eligibility and reasonableness review standards for contracts requesting above-market funds. However, on March 28, 2008, the Executive Director of the CPUC granted a Joint Party Request to bifurcate out some issues addressed in the Draft Resolution in order to obtain more party comments on issues related to establishing the cost limitation and administering the AMFs. As a result, the implementation of SB 1036 is not complete at this time and no further evaluation criteria have been adopted to apply to contacts such as California Sunrise and LACSD that may count towards SCE's cost limitation.

**Contract prices are reasonable and fully recoverable in rates**

While the California Sunrise and LACSD levelized contract prices exceed the 2006 MPR<sup>27</sup>, the Commission finds that the contract prices are reasonable.

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<sup>27</sup> 2006 MPR, Resolution E-4049

[http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_RESOLUTION/63132.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/63132.PDF)

Specifically, the projects' benefit to cost ratios compare favorably to SCE's 2006 shortlisted RPS bids, approval of these contracts will provide greater resource diversity and each project will likely contribute towards SCE's 2010 RPS goal. Both contracts also will connect to SCE's distribution system and transmission upgrade costs are expected to be minimal. Also, the contracts comply with the requirements for above-market cost recovery pursuant to SB 1036 (see above), and the necessary above-MPR costs of the contract are de minimis.

Further rationale for the reasonableness of the LACSD contract price is that it was publicly identified in the LACSD contract (\$95/MWh) and there were no protests.<sup>28</sup> SCE calculated the NPV of above-MPR payments for the 10-year LACSD contract to be \$1.3 million using the CEC's SEP Spreadsheet (See Confidential Appendix D). Because this price was made public and there were no protests, this provides additional support for concluding that the price is reasonable.

Further factors that were considered when evaluating the reasonableness of the California Sunrise contract price are as follows:

- Current average cost of photovoltaic solar installations in California. Specifically, California Sunrise's contract price is reasonable when compared on a per Watt basis to the current average cost of rooftop solar installations in California.<sup>29</sup>
- Contract captures long-term future benefits for ratepayers. If approved, development of this project will advance the commercialization of utility scale wholesale PV technology, in which the facility serves no onsite load, but rather delivers all of its output to the grid.
- Greater technology diversity may increase overall renewable energy supply and increase competition in the market and RPS solicitations.

SCE requested in its advice letter that the Commission approve the contract costs up to the MPR, and SCE said that both contracts would require supplemental energy payments (SEPs) from the California Energy Commission. However, since SCE submitted AL 2143-E, SB 1036 has become effective, and the SEP program has been terminated. The CEC notified parties of the end of SEPs, asked parties to withdraw SEP applications and suggested that parties seek recovery of above-MPR costs of RPS contracts through CPUC processes.<sup>30</sup> The CEC then

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<sup>28</sup> Public Appendix L of Advice Letter 2143-E is the LACSD contract. The levelized TOD-adjusted price is \$95.49. For comparison, the levelized TOD-adjusted MPR is \$80.01.

<sup>29</sup> The current average cost of rooftop solar installations in California is approximately \$8.50 per Watt. CIBC World Markets (Canadian Imperial Bank of Commerce) report, January 2007, and BP Solar website "Solar Savings Calculator".

<sup>30</sup> In an email sent to Docket No. 03-RPS-1078

returned the unencumbered SEP funds to the IOUs.<sup>31</sup> As a result, RPS contracts selected through a competitive solicitation and with above-MPR costs must seek rate recovery of all contract costs from the Commission. Because both the California Sunrise and LACSD contracts meet the requirements of Pub. Util. Code § 399.15(d)(2) (see above), and because the contract prices are reasonable, the Commission will approve cost recovery of all contract costs up to the Seller's bid price.<sup>32</sup>

This price reasonableness evaluation does not set a precedent for Commission review of above-MPR RPS contracts. Confidential Appendix C includes a detailed discussion of the PPAs' pricing terms, and Confidential Appendix D demonstrates that the net present value of the sum of payments to be made under the PPAs are greater than the net present value of payments that would be made at the market price referent for the anticipated delivery.

### **PPAs are viable projects**

SCE believes that the viability of the LACSD is high, and the viability of the California Sunrise contract is moderate. The Commission agrees with SCE's assessments. More specifically, the California Sunrise project faces viability risk from developer inexperience of the project development process as well as an expiring solar tax credit. On balance, the Commission finds that approval of the project will benefit the ratepayers since certain risks are balanced by the facts that the project has secured both financing and a site with a good solar resource, and the price is reasonable for solar PV.

### Project Milestones

The PPAs identify the agreed upon project milestones, including, interconnection agreement, project financing, construction start and commercial operation deadlines.

### Financeability of Resource

LACSD is self-financed through the County of Los Angeles, and the California Sunrise project has both secured financing from the Nautilus Group and has partnered with the Clear Skies Group.

### Production Tax Credit (PTC) and Investment Tax Credit (ITC)

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<sup>31</sup> CEC Resolution 08-0227-9 (Approved February 27, 2008)

<sup>32</sup> In the PPAs, the "Seller's bid price" refers to the contract's total \$/MWh price. The Energy Price is the price up to the MPR.

As a public entity, LACSD is not eligible for the PTC as provided in Section 45 of the Internal Revenue Code of 1986, as amended. The California Sunrise project is eligible for the 30% ITC, as provided in Section 48 of the Internal Revenue Code of 1986, as amended, if it comes online before December 31, 2008 or will be eligible for the 10% ITC if the facility comes online after 2008. The ITC has been extended several times in recent history, and it could be extended again. However, this poses a moderate risk for the project since it is uncertain whether the tax credits will be extended, and the Sellers can terminate the agreement if the tax credits are not extended.

#### Sponsor's Creditworthiness and Experience

The Sanitation Districts of Los Angeles County have nearly two decades of experience operating the power plant at the Palos Verdes Landfill. California Sunrise is a new participant in the utility-scale renewable energy development market, and thus, the project faces a notable project viability risk. For example, the developer has not yet filed an application to receive RPS eligibility from the CEC and is not yet in the transmission queue even though the project expects to be online by the end of this year. Energy Division finds the viability risk to be moderated somewhat for the California Sunrise project both because the developer partnered with Clear Skies Group, which has experience in commercial and residential solar photovoltaic system installation in other areas of the country, and because the project has obtained financing. However, the inexperience could affect the online date of the project.

#### Transmission Upgrades

Both the California Sunrise and LACSD projects will interconnect at the distribution level, but neither project has executed an Interconnection Agreement yet. Minor upgrades may be needed to connect the new LACSD project, and while the necessary upgrades for the California Sunrise project are still unknown, they are not expected to be significant.

### Fuel/Technology

The capacity factor for the California Sunrise project is 27%. The California Sunrise project's capacity factor is high for solar PV; for comparison, the California Solar Initiative currently assumes that the prevailing capacity factor for PV projects in California is between 18% and 20%.<sup>33</sup> Additionally, the PV project will deliver energy during peak periods, which is particularly favorable to SCE's load profile.

The Palos Verdes Landfill has been a fuel source for nearly 19 years, and since the landfill is no longer accepting waste, the resource is declining. The LACSD contract takes the expected resource decline into account, and additionally the facility will be replacing the old power plant with new turbines that can more efficiently convert the low BTU landfill gas to electric energy. However, the methane content of the gas is even lower than that at which the microturbines are guaranteed to perform, so the turbine manufacturer and LACSD are working on a minor redesign of the equipment to accommodate the project. The LACSD project, thus, faces a viability risk, but SCE does not expect this redesign to affect the performance of the contract.

### **Confidential information about the contracts should remain confidential**

Certain contract details were filed by SCE under confidential seal. Energy Division recommends that certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations.

### **COMMENTS**

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

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<sup>33</sup> CSI Calculator v2 User Guide, p.8. <http://www.csi-epbb.com/CSICalculatorV2UserGuide.pdf>

**FINDINGS OF FACT**

1. The RPS Program requires each utility, including SCE, to increase the amount of renewable energy in its portfolio to 20 percent by 2010, increasing by a minimum of one percent per year.
2. D.04-06-014 set forth standard terms and conditions to be incorporated into RPS power purchase agreements.
3. D.07-11-025 granted an amended petition for modification of D.04-06-014, and set forth four non-modifiable standard terms and conditions to be incorporated into RPS power purchase agreements.
4. D.06-05-039 directed the utilities to issue their 2006 renewable RFOs, consistent with their renewable procurement plans.
5. The Commission required each utility to establish a Procurement Review Group (PRG) to review the utilities' interim procurement needs and strategy, proposed procurement process, and selected contracts.
6. Levelized contract prices below the 2006 MPR are considered *per se* reasonable as measured according to the net present value calculations explained in D.04-06-015, D.04-07-029, and D.05-12-042.
7. SCE filed Advice Letter 2143-E on July 27, 2007, requesting Commission review and approval of four renewable energy contracts with Baja Wind, Granite Wind, California Sunrise and LACSD.
8. SCE filed Supplemental Advice Letter 2137-E-A on August 16, 2007, 2007 to supplement, in part, AL 2143-E in order to include the Independent Evaluation Report for SCE's 2006 renewable resource solicitation.
9. SCE filed Supplemental Advice Letter 2137-E-B on January 22, 2008 to supplement, in part, AL 2143-E and AL 2143-E-A in order to comply with D.07-11-025.
10. On January 29, 2008, the Center for Biological Diversity and the Sierra Club filed a late protest the Baja Wind contract.
11. The Energy Division accepted the Center for Biological Diversity and the Sierra Club protest pursuant to D.05-01-032, Appendix, section 4.4 that allows "[t]he reviewing Industry Division may consider a late-filed protest or response."
12. It is reasonable for the Commission to evaluate two of the contracts for which SCE requested approval in AL 2143-E and to reserve judgment on the other two projects.
13. SCE briefed its PRG on its proposed shortlist and status of negotiations for the 2006 RPS solicitation. SCE also briefed the PRG concerning the successful conclusion of discussions with California Sunrise and LACSD.

14. The Commission has reviewed the proposed contracts and finds them to be consistent with SCE's approved 2006 renewable procurement plan.
15. The proposed Seller bid prices for the California Sunrise and LACSD projects are above the 2006 MPR released in Resolution E-4049.
16. Senate Bill 1036 modified the cost recovery mechanism for above-market costs of RPS contracts. As a result, rather than renewable generators seeking SEPs from the CEC for the above-market costs of RPS contracts negotiated through competitive solicitations, the IOUs are now required to seek above-market cost recovery for eligible RPS contracts procured via a competitive solicitation at the Commission.
17. The California Sunrise and LACSD contracts meet the requirements of SB 1036 for contracts to be counted toward SCE's cost limitation.
18. SCE requested CPUC approval of contract costs up to the MPR, however, because SB 1036 became effective January 1, 2008, it is reasonable for the Commission to approve contract costs up to the Seller's bid price for reasonable above-market RPS contracts.

### CONCLUSIONS OF LAW

1. The Commission has reviewed the proposed contracts and finds them to be consistent with SCE's approved 2006 renewable procurement plan.
2. The Agreements are reasonable and should be approved in their entirety.
3. The costs of the contracts between SCE and Sellers are reasonable and in the public interest; accordingly, the payments to be made by SCE up to the Seller's bid prices are fully recoverable in rates over the life of each project, subject to CPUC review of SCE's administration of the PPAs.
4. Both the California Sunrise and LACSD contracts should be applied to SCE's cost limitation pursuant to Pub. Util. Code Section 399.15(d).
5. The reasonableness standards used to evaluate California Sunrise and LACSD do not set a precedent for evaluating future RPS contracts with above market costs.
6. Certain material filed under seal pursuant to Public Utilities (Pub. Util.) Code Section 583 and General Order (G.O.) 66-C, and considered for possible disclosure, should not be disclosed. Accordingly, the confidential appendices, marked "[REDACTED]" in the redacted copy, should not be made public upon Commission approval of this resolution.
7. Procurement pursuant to these Agreements is procurement from eligible renewable energy resources for purposes of determining

Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.

8. Procurement pursuant to these Agreements constitute incremental procurement or procurement for baseline replenishment by Buyer from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation to increase its total procurement of eligible renewable energy resources that it may have pursuant to the California Renewables Portfolio Standard, CPUC Decision 03-06-071, or other applicable law.
9. Any indirect costs of renewables procurement identified in Section 399.15(a)(2) shall be recovered in rates.
10. The California Sunrise and LACSD contracts proposed in AL 2143-E, AL 2143-E-A and AL 2143-E-B should be approved without modifications.
11. CPUC evaluation of the Baja Wind and Granite Wind contracts will be deferred.

**THEREFORE IT IS ORDERED THAT:**

1. The California Sunrise and LACSD contracts proposed in AL 2143-E, AL 2143-E-A and AL 2143-E-B are approved without modifications.
2. The costs of the California Sunrise and LACSD contracts between SCE and Sellers are reasonable and in the public interest; accordingly, the payments to be made by SCE up to the Seller's bid prices, are fully recoverable in rates over the life of the project, subject to CPUC review of SCE's administration of the PPAs.
3. This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 29, 2008; the following Commissioners voting favorably thereon:

/s/ PAUL CLANON  
PAUL CLANON  
Executive Director

MICHAEL R. PEEVEY  
PRESIDENT  
DIAN M. GRUENEICH  
JOHN A. BOHN  
RACHELLE B. CHONG  
TIMOTHY ALAN SIMON  
Commissioners

**Confidential Appendix A**  
Overview of 2006 Solicitation Bids  
[Redacted]

**Confidential Appendix B**  
LCBF Bid Evaluations  
[Redacted]

**Confidential Appendix C**  
Contract Summaries  
[Redacted]

**Confidential Appendix D:**  
Supplemental Energy Payment Spreadsheets  
[Redacted]

**Confidential Appendix E:**  
Project Viability Matrices  
[Redacted]

**Confidential Appendix F:**  
Independent Evaluator's  
Contract-Specific Assessments  
[Redacted]

**Confidential Appendix G:**  
Projects' Contributions Toward RPS Goals  
[Redacted]