

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

**ENERGY DIVISION**

**RESOLUTION E-4188  
December 4, 2008**

**REDACTED**

**R E S O L U T I O N**

Resolution E-4188. Southern California Edison Company requests approval of a renewable portfolio standard power purchase agreement with Gaskell SunTower, LLC (Gaskell), owned by eSolar. The Gaskell contract is approved without modifications.

By Advice Letter 2253-E Filed on July 11, 2008 and AL 2253-E-A filed on September 3, 2008.

**SUMMARY**

**Southern California Edison’s Gaskell contract complies with the Renewable Portfolio Standard (RPS) procurement guidelines and is approved**

Southern California Edison (SCE) filed advice letter (AL) 2253-E on July 11, 2008 requesting Commission review and approval of a renewable energy power purchase agreement (PPA) executed with Gaskell SunTower, LLC (Gaskell), a new solar thermal generating facility being developed by eSolar.

<b>Generating facility</b>	<b>Type</b>	<b>Term (Years)</b>	<b>Capacity (MW)</b>	<b>Energy (GWh)</b>	<b>Expected Online Date</b>	<b>Location</b>
Gaskell SunTower	Solar thermal, new	20	105 - 245	220.8-515.1	April 2012	Kern County, CA

The Gaskell project is proposed to be a new 105 MW facility located in unincorporated Kern County, near Rosamond, CA. Gaskell has the option to expand the facility to up to 245 MW. Gaskell is the first solar thermal project that SCE has executed a contract with since the start of the RPS program. The project is priced above the 2007 market price referent (MPR) for a 20-year contract with an online date in 2012. Deliveries from this PPA are reasonably priced, and the

contract prices are fully recoverable in rates over the life of the contract, subject to Commission review of SCE's administration of the contract. The Gaskell contract is eligible for above-market funds and will be applied toward SCE's cost limitation.

**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**

The California RPS Program was established by Senate Bill (SB) 1078,<sup>1</sup> 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>2</sup>, which encouraged the utilities to procure cost-effective renewable generation in excess of their RPS annual procurement targets<sup>3</sup> (APTs), in order to make progress towards the goal expressed in the EAP.<sup>4</sup> On September 26, 2006, Governor Schwarzenegger signed

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<sup>1</sup> <http://www.energy.ca.gov/portfolio/documents/SB1078.PDF>

<sup>2</sup> [http://www.cpuc.ca.gov/Published/Final\\_decision/36206.htm](http://www.cpuc.ca.gov/Published/Final_decision/36206.htm)

<sup>3</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>4</sup> Most recently reaffirmed in D.06-05-039

Senate Bill 107<sup>5</sup>, which officially accelerated the State's RPS targets to 20 percent by 2010.

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>6</sup>
- Instructions for utility evaluation of each offer to sell products requested in a RPS solicitation (known as 'least-cost, best-fit') were provided in D.04-07-029.<sup>7</sup>
- The Commission adopted standard terms and conditions (STCs) for RPS power purchase agreements in D.04-06-014, as required by Public Utilities Code Section 399.14(a)(2)(D). These STCs have been updated and modified most recently in D.08-04-009<sup>8</sup>, and as a result, there are now thirteen STCs of which four are non-modifiable.
- D.06-10-050, as modified by D.07-03-046, compiled the RPS reporting and compliance methodologies.<sup>9</sup> In this decision, the Commission established methodologies to calculate an LSE's initial baseline procurement amount, annual procurement target (APT) and incremental procurement amount (IPT).<sup>10</sup>
- On June 9, 2004, the Commission adopted its market price referent (MPR) methodology<sup>11</sup>, as defined in Public Utilities Code Sections 399.14(a)(2)(A)

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<sup>5</sup> SB 107, Chapter 464, Statutes of 2006

<sup>6</sup> [http://docs.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/27360.PDF](http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/27360.PDF)

<sup>7</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/38287.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/38287.PDF)

<sup>8</sup> [http://docs.cpuc.ca.gov/WORD\\_PDF/FINAL\\_DECISION/81269.PDF](http://docs.cpuc.ca.gov/WORD_PDF/FINAL_DECISION/81269.PDF)

<sup>9</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)).

<sup>10</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>11</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)

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>12</sup> Subsequent resolutions adopted MPR values for the 2005, 2006 and 2007 RPS Solicitations.<sup>13</sup>

- SB 1078 established a fund, to be administered by the California Energy Commission (CEC), to cover the above-MPR costs of RPS contracts. However, SB 1036 eliminated this fund and established a new mechanism for the Commission to approve rate recovery for the above-MPR costs of RPS contracts. The Commission is now working on implementing SB 1036.

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

Pursuant to SB 1078 and SB 107, the CEC was authorized to “allocate and award supplemental energy payments” to cover above-market costs<sup>14</sup> of long-term RPS-eligible contracts executed through a competitive solicitation.<sup>15</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>16</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. The Commission

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<sup>12</sup> [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_DECISION/52178.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_DECISION/52178.pdf)

<sup>13</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-4118: [http://www.cpuc.ca.gov/word\\_pdf/FINAL\\_RESOLUTION/73594.pdf](http://www.cpuc.ca.gov/word_pdf/FINAL_RESOLUTION/73594.pdf)

<sup>14</sup> “Above-market costs” refers to the portion of the contract price that is greater than the appropriate market price referent (MPR).

<sup>15</sup> Pub. Util. Code 399.15(d)

<sup>16</sup> Statutes of 2007, Chapter 685, Perata

calls these funds the “above-MPR funds (AMFs)”, and is currently implementing rules for calculating and administering the AMFs.<sup>17</sup>

SB 1036<sup>18</sup> 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.
- (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.”

Once a utility’s AMFs are insufficient to support the costs of above-MPR RPS contracts, SB 1036 directs the commission to allow the utility to “limit its procurement to the quantity of eligible renewable energy resources that can be procured at or below the MPR”.<sup>19</sup>

### **SCE requests approval of renewable energy contract**

On July 11, 2008, SCE filed Advice Letter (AL) 2253-E requesting Commission approval of a renewable power procurement contract with Gaskell SunTower, LLC. SCE filed supplemental Advice Letter 2253-E-A on September 3, 2008 to supplement AL 2253-E and include the Independent Evaluator report for SCE’s 2007 RPS solicitation.

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<sup>17</sup> The Commission implemented the rate-changing aspects of SB 1036 in Resolution E-4160. The Energy Division has held a workshop for implementing rules on administering the AMFs on May 29, 2009 and will finalize the rules soon.

<sup>18</sup> Pub. Util. Code § 399.15(d)(2)

<sup>19</sup> 399.15(d)(3)

The Gaskell PPA results from SCE's 2007 solicitation for renewable bids, which was authorized by D.07-02-011. The Commission's approval of the PPA 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>20</sup> Procurement from Gaskell is expected to contribute between 220.8 GWh to 515.1 GWh annually towards SCE's APT in 2012 and beyond. This production would contribute between 1.3% and 3.1% annually towards SCE's 2012 APT<sup>21</sup>.

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

SCE requests a Commission resolution containing the following findings in order to satisfy the "CPUC Approval" terms in the Gaskell Agreement:

1. Approval of the Gaskell Contract in its entirety;
2. A finding that any electric energy sold or dedicated to SCE pursuant to the Gaskell Contract 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;
3. A finding that all procurement under the Gaskell Contract counts, in full and without condition, towards any annual procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
4. A finding that all procurement under the Gaskell Contract counts, in full and without condition, towards any incremental procurement target established by the RPS Legislation or the Commission which is applicable to SCE;
5. A finding that all procurement under the Gaskell Contract counts, in full and without condition, towards the requirement in the RPS Legislation that SCE procure 20% (or such other percentage as may be established by

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<sup>20</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.

<sup>21</sup> SCE's expected 2012 APT is 16,704.4 GWh. (March 2008 Semi-Annual Compliance Report, R.06-05-027)

law) of its retail sales from ERRs by 2010 (or such other date as may be established by law);

6. A finding that the Gaskell Contract, and SCE's entry into the Gaskell Contract, is reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to the Gaskell Contract, subject only to further review with respect to the reasonableness of SCE's administration of the Gaskell Contract; and
7. 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.

On June 27, 2007, SCE advised the PRG of its proposed short list of bids for its 2007 RPS solicitation. On September 27, 2007, SCE updated the PRG as to the status of negotiations with bidders into the solicitation. On May 14, 2008, SCE briefed the PRG concerning the successful conclusion of discussions with Gaskell.

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 2253-E was 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 IV of General Order 96-B.

## **PROTESTS**

Advice Letter 2253-E was not protested.

## **DISCUSSION**

### **Description of the project**

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

<b>Generating facility</b>	<b>Type</b>	<b>Term (Years)</b>	<b>Capacity (MW)</b>	<b>Energy (GWh)</b>	<b>Expected Online Date</b>	<b>Location</b>
Gaskell SunTower	Solar thermal, new	20	105 - 245	220.8-515.1	April 2012	Kern County, CA

The Gaskell project will be a new solar thermal facility located in Kern County, CA and will be developed by Gaskell's parent corporation, eSolar. The project will use eSolar's unique concentrating solar power technology, which is based on existing solar tower technology but which is designed to be more modular and scalable to reduce overall costs. The technology has yet to generate electricity at a commercial scale, but is currently building a demonstration project. Gaskell is the first solar thermal project that SCE has executed a contract with since the start of the RPS program. In addition to having site control, the project has secured financing from eSolar, Idealab, Google.org, and Oak Investment Partners. Gaskell's first point of interconnection is expected to be SCE's proposed Whirlwind Substation, which is part of the proposed Tehachapi Renewable Transmission Project. This contract is above the 2007 MPR and will use SCE's above-MPR funds.

### **Energy Division examined the contract on multiple grounds:**

- PPA is consistent with SCE's CPUC adopted 2007 RPS Plan
- SCE's bid evaluation process is consistent with CPUC's least-cost best-fit (LCBF) decision

- PPA conforms to CPUC adopted STCs
- The project is viable
- The contract price is reasonable

### **The PPA is consistent with SCE's CPUC adopted 2007 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>22</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 2007 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 2007 RPS procurement plan, including its bid solicitation materials, in D.07-02-011.

As ordered by D.07-02-011, on March 2, 2007 SCE filed and served its amended 2007 Plan. The proposed PPA is consistent with SCE's Commission-approved RPS Plan.

### PPA fits with identified renewable resource needs

SCE's 2007 RPS Plan called for SCE to issue a competitive solicitation 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 2007 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.

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<sup>22</sup> Pub. Util. Code, Section §399.14

The proposed Gaskell project fits SCE's identified renewable resource needs. Gaskell is a new renewable energy facility expected to commence deliveries by April 2012, and the facility will have its first point of interconnection within California.

#### PPA selection 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.07-02-011, SCE retained an independent evaluator (IE) to report to SCE's procurement review group about the 2007 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 supplemental AL 2253-E-A, the IE performed his duties overseeing the 2007 solicitation and has provided assessment reports to the PRG and the CPUC. See Appendix E for a detailed discussion of the IE's review of these projects.

SCE says that all proposed agreements, including the Gaskell project, were solicited, negotiated and executed in a manner consistent with SCE's 2007 RFP Protocol. All 2007 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 LCBF decision**

The CPUC's LCBF decision<sup>23</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.

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<sup>23</sup> D.04-07-029

SCE's LCBF bid review process used for its 2007 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.

The benefit-to-cost ratio for the Gaskell project was favorable in comparison to the bids in SCE's 2007 solicitations. See Confidential Appendix A for more detailed bid comparisons.

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

Consistent with D.07-02-011, SCE retained an IE, Sedway Consulting, to report to SCE's procurement review group about the 2007 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 2253-E-A, Sedway

Consulting performed its duties overseeing the 2007 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 2007 RPS RFP and made the correct selection decisions in its short list.” Sedway Consulting performed its own evaluation of all 2007 proposals using its own proprietary 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 short-listing decisions. In addition, the IE monitored SCE’s short-listing 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 2007 renewable energy proposals.

For the IE’s contract-specific evaluation about the Gaskell project, see Confidential Appendix E.

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

STCs for Gaskell are in compliance with D.08-04-009.

### **PPA is a viable project**

SCE believes that the viability of the Gaskell project is high. However, the Commission is aware that the project may face some project viability risk due to unknown transmission upgrades. On balance, the Commission finds that approval of the project will benefit the ratepayers since the risks are balanced by the fact that the project has site control, financing and a development team that has experience in financing, constructing, and operating large scale engineering projects, including solar facilities.

### Project Milestones

The PPA identifies the agreed upon project milestones, including, interconnection agreement, permits, financing, construction start and commercial operation deadlines.

### Financeability of Resource

eSolar has already secured a substantial amount of financing from Idealab, Google.org and Oak Investment Partners. SCE considers Idealab a strong financial backer with a proven track record at developing successful companies.

While recent events have affected financial markets, we can not yet determine how this will affect the financing for renewable energy projects, including Gaskell.

### Investment Tax Credit (ITC)

Gaskell is contingent upon the federal investment tax credit (ITC), which was recently extended until the end of 2016. On October 3, 2008, President Bush signed the Emergency Economic Stabilization Act of 2008, House Resolution (H.R.) 1424 (2008) that, in part, extended the ITC for solar energy projects.<sup>24</sup> This extension provides important certainty for the solar market and adds to the viability of this project.

### Sponsor's Creditworthiness and Experience

Gaskell's parent corporation, eSolar of Pasadena, CA, is a new solar thermal company. However, according to SCE, eSolar is led by people who have extensive experience in financing, constructing, and operating large scale engineering projects including solar facilities. Additionally, Gaskell is backed by Idealab, Google.org and other capital partners.

### Transmission Upgrades

Transmission studies are needed to determine the transmission upgrades and costs associated with the Gaskell project. The Gaskell project will be located near the proposed Tehachapi Renewable Transmission Project (TRTP) and may take advantage of this new transmission capacity.<sup>25</sup> Because TRTP is a large and complex transmission project, it is reasonable to conclude that there is some transmission risk associated with the Gaskell project.

### Fuel/Technology

The Gaskell project utilizes solar tower technology with new unique features developed by eSolar. SCE considers solar tower technology "proven and mature"<sup>26</sup>. Although there are no commercially operating projects in California

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<sup>24</sup> <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:H.R.1424>: (Last visited October 6, 2008)

<sup>25</sup> SCE submitted a Certificate of Public Convenience and Necessity (CPCN) application for the TRTP in June 2007, and a final Commission decision is expected in 2009. The Commission has not yet issued a decision in the TRTP CPCN application and we do not pre-judge that application here.

<sup>26</sup> AL 2253-E, page 11

currently, there have been two small operational demonstration projects in the Mojave Desert.<sup>27</sup> eSolar's technology includes enhancements to the demonstrated solar tower technology, "which include a revolutionary mirror control system, shorter towers, and a unique building block approach to the array of mirrors that reduces construction cost."<sup>28</sup> Overall, eSolar's approach is to make a scalable and cost-competitive utility-scale solar facility.

The expected capacity factor for the Gaskell project is 24%. The project will deliver energy during peak periods, which is particularly favorable to SCE's load profile.

### **Contract price is reasonable**

Gaskell's levelized contract price exceeds the 2007 MPR<sup>29</sup>. The Commission finds that the contract price is reasonable based on the following considerations:

1. Contract price compares favorably to bid supply curves for all projects bid into SCE's 2007 solicitation
2. Contract price is reasonable when compared to solar thermal energy costs on levelized cost of energy (\$/MWh) basis
3. Contract captures long-term future benefits for ratepayers. If approved, development of this project will advance the commercialization of solar power tower technology

Appendix A shows that the Gaskell project's benefit-to-cost ratio compares favorably both to all bids in SCE's 2007 solicitation as well as short-listed bids. In addition, the price is reasonable in comparison to the projected costs of building a solar thermal facility identified in the Renewable Energy Transmission Initiative (RETI) Phase 1A Final Report.<sup>30</sup>

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<sup>27</sup> Solar One was a 10-MW pilot solar-thermal project designed by the Department of Energy, SCE, LA Department of Water and Power and CEC, which was operational between 1982 and 1986. Solar One was converted into Solar Two in 1995 and operated until 1999.

<sup>28</sup> AL 2253-E, pg 11

<sup>29</sup> Resolution E-4118: [http://docs.cpuc.ca.gov/published/Final\\_resolution/73594.htm](http://docs.cpuc.ca.gov/published/Final_resolution/73594.htm)

<sup>30</sup> <http://www.energy.ca.gov/2008publications/RETI-1000-2008-002/RETI-1000-2008-002-F.PDF>

Approval of this contract will increase in-state renewable energy generation and provide greater resource diversity. As captured in this LCBF analysis, the Gaskell project and other solar projects have predominantly on-peak generation profile provides power when it is most needed to serve customer demand, and thus, are not usually burdened with remarketing costs. Further, as discussed above, SCE has provided sufficient evidence that the Gaskell project is viable. While transmission upgrades and costs are unknown, this concern is shared among the majority of RPS projects. The project is considered relatively viable because it has site control for the initial 105 MWs, is located in a region with an adequate solar resource, is being developed by an experienced team, is already in the CAISO queue and the ITC was recently extended.

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 contractual pricing terms.

**Contract is 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. The Gaskell contract satisfies the conditions:

- Gaskell was selected through SCE's 2007 competitive solicitation; the contract is consistent with SCE's approved procurement plan,
- Gaskell contract is at least 10 years in duration,
- Gaskell will be a new facility,
- Gaskell is not a contract for unbundled renewable energy credits, and
- SCE asserts that the Gaskell contract does not 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, including the review standards for above-MPR contracts. 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 Gaskell that may count

towards SCE's cost limitation. Thus, we approve the Gaskell contract to count towards SCE's cost limitation solely based on the criteria stipulated in SB 1036. This does not set a precedent for the review of above-MPR RPS contracts.

Confidential Appendix F includes a detailed discussion of the AMF reservation requirement and calculations.

### **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, a draft resolution was mailed to parties for comments on October 30, 2008.

No comments were received.

### **FINDINGS**

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.08-04-009, as revised by D.08-08-028, sets forth four non-modifiable and nine modifiable standard terms and conditions to be incorporated into RPS power purchase agreements.
3. D.07-02-011 directed the utilities to issue their 2007 renewable RFOs, consistent with their renewable procurement plans.

SCE AL 2253-E and 2253-E-A/SMK

4. 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.
5. Levelized contract prices below the 2007 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.
6. SCE filed Advice Letter 2253-E on July 11, 2008, requesting Commission review and approval of a new renewable energy contract with Gaskell Suntower, LLC.
7. SCE filed supplemental Advice Letter 2253-E-A on September 3, 2008 to include the Independent Evaluator report for SCE's 2007 RPS solicitation.
8. SCE briefed its PRG on its proposed shortlist and status of negotiations for the 2007 RPS solicitation. SCE also briefed the PRG concerning the successful conclusion of discussions with Gaskell.
9. The Commission has reviewed the proposed contract and finds it to be consistent with SCE's approved 2007 renewable procurement plan.
10. The contract price for the Gaskell PPA is above the 2007 MPR released in Resolution E-4118.
11. The Gaskell contract meets the requirements of SB 1036 for contracts to be counted toward SCE's cost limitation; this contract will be applied to SCE's cost limitation.
12. The Agreement is reasonable and should be approved in its entirety.
13. The costs of the contract between SCE and Seller are reasonable and in the public interest; accordingly, the payments to be made by SCE are fully recoverable in rates over the life of the project, subject to CPUC review of SCE's administration of the PPA.
14. 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.
15. Procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.

16. Procurement pursuant to this Agreement constitutes 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.
17. The Gaskell contract proposed in AL 2253-E should be approved without modifications.

**THEREFORE IT IS ORDERED THAT:**

1. The Gaskell contract proposed in AL-2253-E is approved without modification.
2. The costs of the contract between SCE and Gaskell are reasonable and in the public interest; accordingly, the payments to be made by SCE pursuant to the PPA are fully recoverable in rates over the life of the project, subject to CPUC review of SCE's administration of the PPA.
3. The Gaskell contract will be applied to SCE's cost limitation pursuant to Pub. Util. Code Section 399.15(d).
4. 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 December 4, 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 SCE's 2007 Solicitation Bids  
[REDACTED]

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

**Confidential Appendix C**  
Gaskell Contract Summary  
[REDACTED]

**Confidential Appendix D:**  
Project Viability Matrix  
[REDACTED]

**Confidential Appendix E:**  
Independent Evaluator's  
Contract-Specific Assessments  
[REDACTED]

**Confidential Appendix F:**  
Above-MPR Funds Calculation  
[REDACTED]