

DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION *

Item #14 I.D.# 10832
12/14/11, 10 AM
RESOLUTION E-4445
December 15, 2011

REDACTED

R E S O L U T I O N

Resolution E-4445. Southern California Edison (SCE) requests approval of twenty renewable power purchase agreements.

PROPOSED OUTCOME: This Resolution approves fifteen renewable power purchase agreements (PPA) resulting from SCE's 2010 Renewables Standard Contracts (RSC) Program. SCE terminated five of the twenty PPAs.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 2547-E filed on January 31, 2011 and 2547-E-A filed on April 15, 2011.

SUMMARY

Southern California Edison's Renewable Power Purchase Agreements comply with the Renewables Portfolio Standard (RPS) procurement guidelines and are approved.

Southern California Edison (SCE) filed advice letter (AL) 2547-E on January 31, 2011 requesting Commission approval of twenty solar photovoltaic (PV) renewable power purchase agreements (PPAs) resulting from SCE's 2010 Renewables Standard Contracts (RSC) Program. SCE's RSC program is a voluntary program initiated by SCE to increase its renewable portfolio.

SCE filed substitute sheets on February 2, 2011, which corrected a minor formatting error, and a supplement to AL 2547-E on April 15, 2011, which amended the RSC contracts to include the new standard terms and conditions

required for bundled RPS contracts under D.10-03-021, as modified by D.11-01-025.

Following the filing of SCE's AL, five of the projects exceeded the transmission cost cap stated in their contracts. On November 7 and 8, 2011, SCE sent termination notices to two of the project developers notifying them of the cancellation of five PPAs. Termination is effective five business days after termination notices are sent to the seller. The terminated projects are summarized in the table below and total 95 MW.

Table 1. Summary of the five terminated RSC contracts

Seller	Parent Company	Contract Capacity (MW AC)
Sierra Solar Greenworks LLC	Silverado	20.0
Central Antelope Dry Ranch C LLC	Silverado	20.0
North Lancaster Ranch LLC	Silverado	20.0
American Solar Greenworks LLC	Silverado	15.0
RE Columbia Two LLC	Recurrent Energy	20.0

The remaining fifteen power purchase agreements reflect projects ranging from approximately 5 – 20 megawatts (MW) from six different renewable project developers. In total this Resolution approves contracts for 144 MW of new solar PV capacity with estimated annual deliveries of 364 gigawatt-hours. Approved contracts are listed in Appendix A.

The PPAs are consistent with SCE's 2009 RPS Procurement Plan approved in D.09-06-018. The Commission approves the contract prices set forth in the proposed PPAs, finding that prices are reasonable and will ensure that the PPAs provide the greatest value for SCE's ratepayers. Deliveries from the PPAs are fully recoverable in rates over the life of the contracts, subject to Commission review of SCE's administration of the contracts.

The following table provides a summary of the fifteen approved RSC contracts.

Table 2. Summary of the fifteen approved RSC contracts

Seller	Parent Company	Generation Type	Contract Capacity (MW AC)	Estimated Annual Energy (GWh)	Forecasted Initial Operation Date	Term of Years	Location
Lancaster Dry Farm Ranch B LLC	Silverado	Solar PV	5.0	12.2	4/2014	20	Lancaster, CA
Lancaster WAD B LLC	Silverado	Solar PV	5.0	12.4	4/2014	20	Lancaster, CA
Central Antelope Dry Ranch B LLC	Silverado	Solar PV	5.0	10.2	4/2014	20	Lancaster, CA
Victor Dry Farm Ranch A LLC	Silverado	Solar PV	5.0	10.3	4/2014	20	Lancaster, CA
Victor Dry Farm Ranch B LLC	Silverado	Solar PV	5.0	10.3	4/2014	20	Victorville, CA
Sierra View Solar V LLC	Juwi Solar	Solar PV	19.0	50.0	12/2013	20	Mohave, CA
Sierra View Solar IV LLC	Juwi Solar	Solar PV	19.0	49.4	12/2013	20	Lancaster, CA
Nicolis, LLC	Foresight Renewables	Solar PV	20.0	50.1	9/2013	20	Weldon, CA
Blythe Solar Power Generation Station 1, LLC	Amonix	Solar PV	4.7	12.2	6/2013	20	Blythe, CA
Littlerock Solar Power Generation Station 1, LLC	Amonix	Solar PV	5.0	13.6	4/2013	20	Littlerock, CA

Seller	Parent Company	Generation Type	Contract Capacity (MW AC)	Estimated Annual Energy (GWh)	Forecasted Initial Operation Date	Term of Years	Location
Garnet Solar Power Generation Station 1, LLC	Amonix	Solar PV	4.8	11.3	6/2013	20	North Palm Springs, CA
Lucerne Solar Power Generation Station 1, LLC	Amonix	Solar PV	14.0	37.6	3/2014	20	Lucerne Valley, CA
Tropico, LLC	Foresight Renewables	Solar PV	14.0	36.2	9/2013	20	Rosamond, CA
Clear Peak Energy, Inc. RE	Clear Peak Energy	Solar PV	8.5	23.6	12/2013	20	Rosamond, CA
Columbia 3, LLC	Recurrent Energy	Solar PV	10	24.9	1/2014	20	Mohave, CA

BACKGROUND

Overview of the Renewables Portfolio Standard (RPS) Program

The California RPS Program was established by Senate bill (SB) 1078, and has been subsequently modified by SB 107, SB 1036, and SB 2 (1x).¹ The RPS program is codified in the Public Utilities Code Sections 399.11-399.20.² Under SB 2 (1x), the RPS program administered by the Commission requires each retail seller to increase its total procurement of eligible renewable energy resources so

¹ SB 1078 (Sher, Chapter 516, Statutes of 2002); SB 107 (Simitian, Chapter 464, Statutes of 2006); SB 1036 (Perata, Chapter 685, Statutes of 2007); SB 2 (1x) (Simitian, Chapter 1, Statutes of 2011, First Extraordinary Session).

² SB 2 (1x) became effective on December 10, 2011; 90 days after the close of the Legislatures 2011 Extraordinary Session.

that 33 percent of retail sales are served by eligible renewable energy resources no later than December 31, 2020.³ Aspects of SB 2 (1x) related to compliance targets have been implemented by the Commission in D.11-12-020.

Additional background information about the Commission's RPS Program, including links to relevant laws and Commission decisions, is available at <http://www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm> and <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

SCE's Renewables Standard Contract (RSC) Program

SCE voluntarily created a standard contracting program for small RPS-eligible projects. The program was originally designed for biomass facilities under 20 megawatt (MW), which SCE initiated in 2007 in response to Executive Order S-06-06 establishing targets to increase the production and use of bioenergy. In 2008, SCE expanded RSC program eligibility to all RPS-eligible technologies in order to provide a streamlined procurement process for smaller RPS-eligible projects. Both the Standard Biomass Program and the 2008 and 2009 RSC programs offered a standard contract for projects up to 20 MW at the market price referent (MPR).

In D.09-06-018, the Commission accepted SCE's 2009 RSC Program as part of its 2009 RPS Plan.⁴ SCE received a large number of offers in response to the 2009 RSC program, which together exceeded the program goal of 250 MW. Given that the program cap was exceeded, SCE temporarily suspended the RSC program, allowing time to conduct an analysis to review options for restarting the program in 2010. Based on this analysis, SCE revised the program for 2010, again with a goal of 250 MW.

The 2010 RSC program instituted several important changes from the 2009 program: it eliminated the use of the MPR to set the contract price and used a reverse auction to select winning projects based on the lowest cost contracts. The 2010 RSC Program offered two different contracts that varied depending on the

³ See SB 2 (1x), § 399.15(b)(2)(B).

⁴ D.09-06-018, page 61.

size of the facility – one for facilities with capacities not greater than 5 MW and one for facilities with capacities above 5 MW and up to 20 MW. The 2010 RSC contracts were offered for terms of 10, 15, and 20 years and based on a simplified version of the Pro Forma Renewable Power Purchase and Sale Agreement that SCE submitted as part of its 2010 RPS procurement plan in Rulemaking (R.) 08-08-009. The 2010 RSC Program also changed the commercial operation online date deadline from 18 months to 36 months from CPUC approval.

SCE submitted its 2010 RPS Procurement Plan to the Commission on December 18, 2009, outlining the above changes for the 2010 RSC program, and noticing the Commission of its continued intent to procure renewable contracts through the RSC program. SCE initiated its 2010 RSC request for offers (RFO) in September, 2010, before the Commission adopted SCE's procurement plan.⁵

The Commission ordered SCE to file amendments to its 2010 RPS Procurement Plan, and because the proceeding continued into 2011, the Commission required SCE to file an update to its 2010 plan, renamed the 2011 RPS Procurement Plan. The Commission approved the 2010/2011 RPS Procurement Plan on April 14, 2011 in D.11-04-030. The Commission had not approved the 2010/2011 RPS Procurement Plan in 2010 when SCE conducted the 2010 RSC RFO.

While SCE conducted its 2010 RSC RFO without CPUC approval or review, on August 24, 2010, prior to the launch of the 2010 RSC RFO, the Commission issued a proposed decision adopting the Renewable Auction Mechanism (RAM) program. The proposed decision outlined various requirements for the RAM program. Following the proposed decision, SCE launched its RSC RFO in September 2010. Before the RAM proposed decision was approved, SCE executed 21 contracts under its RSC program.⁶

⁵ SCE's 2010 procurement plan was ultimately approved in D.11-04-030.

⁶ One contract was terminated prior to SCE's filing of Advice Letter 2547-E, and as stated previously, five additional contracts were terminated subsequent to SCE's Advice Letter filing in AL 2547-E-B.

In sum, although the Commission approved the type of procurement under the RSC program in D.09-06-018 regarding the 2009 RSC plan, it never approved the solicitation process used by SCE for its 2010 RSC program. In order to evaluate the requested PPAs, staff compared the PPAs to the standards and requirements for similar programs.

Staff compared the fifteen PPAs at issue to the RAM, SCE's Solar PV Program (SPVP), and the 2009 RSC. Due to the similarity between these programs, including similar goals of spurring the development of smaller sized renewable facilities, these programs provide the Commission with comparable and reasonable benchmark criteria to evaluate the fifteen 2010 RSC PPAs. Additionally, it is appropriate to hold SCE to the same standards as the SPVP and the 2009 RSC since these programs were in place and approved before SCE conducted the 2010 RSC Solicitation. Lastly, SCE had notice of the proposed RAM decision.

Market Price Reference

The 2009 MPR for projects with a 20 year contract length and 2013 online date is \$108.98/MWh.⁷ Each 2010 RSC project is priced below the 2009 MPR of \$108.98/MWh.

NOTICE

Notice of AL 2445-E and AL 2445-E-A was made by publication in the Commission's Daily Calendar. SCE states that copies of Advice Letter 2445-E and 2445-E-A were distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

No protests were received to this advice letter.

⁷ The 2009 MPR is the most current MPR available; the Commission did not issue a 2010 MPR.

DISCUSSION

SCE Requests Approval of Contracts from its 2010 Renewables Standard Contracts program

As part of its 2010 RSC Program, SCE executed 20 PPAs for solar PV facilities in California. The PPAs are based on SCE's two standard contracts, one for projects up to 5 MW and one for projects between 5 MW and 20 MW. Only minor modifications were made to the RSC standard contracts to conform the PPAs to the project's specifications. As part of the contract, SCE required a transmission cost cap. Five projects exceeded this cost cap, and SCE subsequently terminated five of those contracts.

SCE requests that the Commission issue a resolution containing:

1. Approval of the RSC Contracts in their entirety;
2. A finding that any electric energy sold or dedicated to SCE pursuant to the RSC Contracts constitutes procurement by SCE from an ERR for the purpose of determining SCE's compliance with 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 RSC Contracts counts, in full and without condition, toward any annual procurement target established by the RPS Legislation or the Commission that is applicable to SCE;
4. A finding that all procurement under the RSC Contracts counts, in full and without condition, toward any incremental procurement target established by the RPS Legislation or the Commission that is applicable to SCE;
5. A finding that all procurement under the RSC Contracts 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 law) of its retail sales from ERRs by 2010 (or such other date as may be established by law);
6. A finding that the RSC Contracts, and SCE's entry into the RSC Contracts, are reasonable and prudent for all purposes, including, but not limited to,

recovery in rates of payments made pursuant to the RSC Contracts, subject only to further review with respect to the reasonableness of SCE's administration of the RSC Contracts;

7. A finding that all procurement under the RSC Contracts counts, in full and without condition, towards SCE's capacity cap under the RAM pursuant to D.10-12-048; and
8. Any other and further relief as the Commission finds just and reasonable.

Energy Division Evaluated the Proposed PPAs on the Following Grounds:

- Consistency with SCE's 2009 RPS Procurement Plan
- Consistency with RPS Standard Terms and Conditions (STCs)
- Consistency with the Renewable Auction Mechanism (RAM) and SCE's Solar PV Program (SPVP) Viability Requirements
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)
- Cost Reasonableness
- Procurement Review Group (PRG) Participation
- Independent Evaluator (IE) Requirements
- Compliance with the Minimum Standard Conditions

Consistency with SCE's 2009 RPS Procurement Plan

California's RPS statute requires the Commission to direct each utility to prepare a Renewable Energy Procurement Plan (Plan) and then review and accept, modify, or reject the Plan prior to the commencement of a utility's annual RPS solicitation.⁸ The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan.

⁸ Pub. Util. Code Section §399.14

The PPAs are consistent with SCE's 2009 RPS Procurement Plan, approved by D.09-06-018 and subsequently amended by SCE.

Consistency with RPS Standard Terms and Conditions (STCs)

The RSC standard contracts are simplified versions of SCE's Commission-approved 2009 RPS pro forma contract. They contain the non-modifiable STCs and thus, comply with D.08-04-009, as modified by D.08-08-028. Since the RSC Program uses a standard contract, SCE only made modest changes to the modifiable terms for project-specific needs.

After SCE's RSC contracts had been executed, the Commission established two additional non-modifiable terms in D.10-03-021, as modified by D.11-01-025: 1) Transfer of Renewable Energy Credits, and 2) Tracking of RECs in WREGIS. SCE filed a supplement to its Advice Letter on April 15, 2011, which amended the RSC contracts to include the additional non-modifiable terms added by D.11-01-025.

The terms and conditions in the PPAs comply with the non-modifiable terms required in RPS contracts as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

Comparison to the Renewable Auction Mechanism's (RAM) and SCE's Solar PV Program's (SPVP) Viability Requirements

SCE's RSC Program is a voluntary program. Although the Commission has previously approved multiple contracts from SCE's 2007, 2008, and 2009 RSC Program, the Commission has not formally approved SCE's RSC RFO process.

Because the RSC RFO process has not been approved by the Commission, in assessing SCE's PPAs, staff evaluated the PPAs using requirements from the RAM and SPVP Programs as benchmarks for assessing reasonableness.

The RAM and SPVP Programs

RAM establishes project viability criteria for renewable contracts of up to 20 MW, with the goal of promoting robust competition for smaller renewable projects. In D.10-12-048 or the "RAM Decision", which adopted the RAM program, the

Commission ruled that “RAM should be the primary procurement vehicle for projects in this size range,” and that “going forward, SCE shall conform its [RSC] program to the guidance and framework provided” in the RAM decision.⁹ The Commission also ruled that SCE may count contracts already executed under the 2010 RSC towards its RAM capacity cap.¹⁰

Even though the RSC contracts were executed prior to the final RAM decision, the similarities in project goals, project size, and the targeted technology of eligible projects make the RAM decision an appropriate benchmark for evaluating the RSC PPAs. The RSC approved contracts will also count towards SCE’s RAM capacity, making RAM program requirements an especially reasonable benchmark.

Similarly, the SPVP is a five-year program adopted by the Commission in D.09-06-049 to spur the development of distributed solar PV projects in SCE’s service territory, primarily commercial rooftop projects in the one to two MW range, but not more than 10 MW. Thus it is also reasonable to compare the results of the SPVP program with the RSC results.

Eligibility

The RAM and SVPV programs employ clear eligibility protocols. RAM is open to any RPS-eligible technology and requires that: 1) the project is located anywhere within the combined service territories of the three IOUs and 2) that the project size is limited to up to 20 MW. SPVP is open only to solar PV, requires projects to be located within SCE’s service territory, and limits project size to 10 MW.

All of the 2010 RSC projects conform to the RAM and SPVP eligibility criteria. While the RSC contracts were open to any projects within the CAISO controlled

⁹ D.10-12-048, at page 3-4.

¹⁰ D.10-12-048, at page 4.

grid, all fifteen of the RSC projects are within SCE's service territory, so the eligibility criteria is met irrespective of which standard is used. Additionally, all projects are 20 MW or lower.

The 2010 RSC projects have met the relevant criteria for eligibility established in the RAM Decision and the SPVP.

Project Viability Assessment

Project viability criteria articulated in the RAM Decision require: 1) demonstrated site control, 2) demonstrated development experience, 3) commercialized technology, 4) sellers have filed an interconnection application prior to bid submission, and that 5) projects have an 18 month online deadline.¹¹ The SPVP project viability criteria, articulated in Resolution E-4299, require that 1) projects be located within SCE's service territory, 2) sellers have demonstrated site control, 3) projects have an 18 month online deadline, and 4) that projects not trigger transmission network upgrades.

During the Request for Offers (RFO) stage, SCE did not use the Commission's Project Viability Calculator (PVC) to assess project viability or otherwise conduct a viability screen. Instead, projects were evaluated based on levelized price of the contracts and the ability to achieve the Commercial Online Date (COD) within 36 months of CPUC approval. In order to confirm that projects were able to meet the COD, SCE evaluated the transmission requirements for all projects by consulting with SCE's Grid Interconnections Department. SCE rejected projects sited in areas with transmission constraints. Because of this finding, projects found to be more viable were substituted onto the short list from those on the provisional short list.

¹¹ D.10-12-048 requires a developer to have filed an interconnection agreement in order to participate in a RAM auction. Resolution E-4414 strengthened this requirement by requiring a generator to have completed a System-Impact Study, Phase I Cluster Study, or have passed the Fast Track screens.

While SCE did not apply a set of project viability screens when evaluating the offers, SCE calculated PVC scores for the twenty executed contracts and included this information in its Advice Letter. In addition, in order to evaluate the RSC contracts, the IE reviewed the overall viability of the projects. The IE found some weaknesses pertaining to project viability. For instance, there was no requirement that the bidder had to demonstrate site control. The IE suggested several ways SCE could improve its evaluation process in the future, such as requiring bidders to provide a project milestone schedule. Overall, the IE found that SCE’s assessments pertaining to project viability, although “modest,” were reasonable “given the nature of the RSC RFO design, which is oriented toward simplicity, expedition, and low transaction costs.”¹²

Table 3 below provides staff’s high level summary of project viability and contract issues consistent with the information generally required by bid evaluation and project viability protocols. See Confidential Appendix C for additional information about project viability regarding the status of transmission, permits, and site control.

Table 3. RSC Contracts Project Viability Summary

Seller	Developer Experience	Technology	Facility Vintage
Silverado	Developed 500 MW of solar	Solar PV	New
Juwi Solar	Involved in development of over 1,000 PV projects; current generating capacity of 300 MW	Solar PV	New
Amonix	Operated 16 solar PV site in the United States and Europe; currently operating 4 <1 MW projects in the	Solar PV	New

¹² Advice letter 2547-E, Appendix C, Report of Independent Evaluator, Southern California Edison Company 2010 Renewables standard Contracts Program Request for Offers (January, 2011), page 30.

Seller	Developer Experience	Technology	Facility Vintage
	United States.		
Foresight Renewables	3,500 MW of wind and 200 MW of solar under development, including 1,235 MW of operating electricity projects.	Solar PV	New
Clear Peak Energy	General contractor for project has completed or currently working on over 275 MW of wind projects, and has engineered and designed 38 MW of solar PV projects.	Solar PV	New
Recurrent Energy	370 MW of contracted projects, including 26 MW currently operating	Solar PV	New

In weighing the viability of the RSC contracts, Energy Division compared the contracts to the requirements articulated in RAM and SPVP, including 1) demonstrated site control, 2) demonstrated development experience, 3) commercialized technology, and 4) have filed an interconnection application prior to bid submission or have completed a system-impact study, phase I study, or have passed the fast track screens.¹³ See Confidential Appendix C for more information on site control and transmission status.

All project developers for the 2010 RSC projects have some form of site control, such as exclusive options to purchase or lease project sites. While SCE states that the sellers have varying degrees of experience in the field of renewable energy

¹³ D.10-12-048, the Decision Adopting the Renewable Auction Mechanism, requires a developer to have filed an interconnection agreement in order to participate in a RAM auction. Resolution E-4414 strengthened this requirement by requiring a generator to have completed a System-Impact Study, Phase I Cluster Study, or have passed the Fast Track screens.

project development, all six sellers have experience developing electricity infrastructure in North America, including development of solar PV facilities.

Additionally, all projects involve commercial technologies. Solar PV is a mature and proven renewable energy technology that has been supplying a substantial amount of renewable energy to SCE and other California load-serving entities for several years.

The proposed projects are also in various stages of the interconnection study and application process. Most projects have at least the first study in the interconnection process completed or in progress. Since the RAM Decision only required the filing of an interconnection application, the RSC contracts meet this criterion.

The 2010 RSC projects have mostly met the benchmark criteria for project viability adopted by the Commission for the RAM and SPVP Programs.

Contract Terms

The RAM and SPVP programs employ non-negotiable contract terms in order to create a standardized, simplified process, and reduce transaction costs for small renewable projects.¹⁴ Pricing terms under these programs are set at the bid price, i.e., price is not negotiated.¹⁵ RAM and SPVP require an 18 month Commercial Online Date (COD) from contract execution, with one six month extension allowed for regulatory delays. Finally, the RAM program requires that the developer make a security deposit of \$20/kW for projects 5 MW and smaller and a \$60/\$90 per kW for projects greater than 5 MW and up to 20 MW.

¹⁴ D.10-12-048, page 17.

¹⁵ This is different from the RPS solicitation process where contract price and other terms and conditions are generally negotiated between the buyer and seller.

The 2010 RSC RFO was conducted using two different standardized contracts, one for projects not greater than 5 MW, and one for projects with capacities greater than 5 but less than 20 MW. The standard 2010 RSC contracts are consistent with much of the required terms and conditions established in the RAM Decision, since the RAM contract was based on the RSC contract.

The 18 month online date required for RAM and SPVP contracts presents a discrepancy between the RSC contracts, which allow a 36 month COD. The RAM program allows a 6 month extension for regulatory delays, for a maximum online date of 24 months. The 18 month deadline for the RAM and SPVP programs was established because both programs are designed for a market segment that can come online quickly, and are meant to be a streamlined process utilizing existing transmission and distribution infrastructure.

According to SCE, some RSC projects will require transmission and/or distribution upgrades, requiring a longer COD. Because the 36 month COD has already been executed, and sellers are working on completing transmission studies based on this timeline, we find that it is reasonable for the 2010 RPS contracts.

However, it is important to make the COD terms in the RSC contracts a meaningful requirement consistent with the Commission adopted RAM and SPVP programs. Currently, the contract allows SCE to terminate the contract if the COD is not met, or prior to the COD, with notice to the seller and an opportunity to respond, if it believes that the COD will not be met. The 2010 RSC contract also provides SCE the ability to extend the 36 month COD if the seller cannot meet the deadline.

In order to better align the 2010 RSC program with the CPUC RAM and SPVP programs, staff recommends tracking SCE's administration of contracts for projects that are unable to meet the 36 month COD. Within 30 days of the 36 month deadline, SCE should file a Tier 1 advice letter, providing an update on the status of each project that has not reached commercial operation. If SCE does not plan on terminating a project that will exceed the 36 month COD, the advice letter should adequately demonstrate the merits for granting the project an extension and state the expected, new COD. This will ensure that the benefits

envisioned in the RAM program are achieved, including streamlined administration and selection of viable projects that are further along in the project development process.

Finally, the RSC contracts require producers with a project not greater than 5 MW, to pay development security of \$30/kW of the contract capacity, and for producers with a project greater than 5 MW but not greater than 20 MW, to pay development security of \$60/kW of the contract capacity.

This is very similar to RAM requirements of \$20/kW for projects of 5 MW or less, and the same \$60-\$90/kW¹⁶ requirement for projects of up to 20 MW, and does not warrant a change.

The 2010 RSC contracts conform with the project development security requirements used in the RAM and SPVP programs.

RSC Contract Capacity Can Be Applied to SCE's RAM Capacity.

The RAM Decision, D.10-12-048, allowed SCE to count CPUC-approved RSC contracts towards its RAM requirement.

SCE may count the fifteen PPAs approved in this Resolution towards its RAM requirement, for a total of 144 MW. Because the original RAM program goal was 498.4 MW, this leaves SCE with 354.4 MW to procure for the RAM program. SCE may not count other 2010 RSC contracts executed, and subsequently terminated, which have not been approved in this Resolution. If any of the CPUC contracts are terminated at a future date, then SCE is required to procure the terminated contract capacity through RAM.

SCE may count the fifteen PPAs approved herein towards its capacity cap under the RAM program, for a total of 144 MW. Because the original RAM program

¹⁶ Intermittent generators including solar PV are subject to the \$60/kW development security.

goal was 498.4 MW, this leaves SCE with 354.4 MW to procure for the RAM program.

Compliance with the Interim Greenhouse Gas Emissions Performance Standard (EPS)

California Public Utilities Code Section 8340 and 8341 require the Commission to consider emissions associated with new long-term (five years or greater) power contracts procured on behalf of California ratepayers.

D.07-01-039 adopted an interim EPS that establishes an emission rate for obligated facilities at levels no greater than the greenhouse gas (GHG) emissions of a combined-cycle gas turbine power plant. The EPS applies to all energy contracts for baseload generation that are at least five years in duration.¹⁷ Generating facilities using certain renewable resources are deemed compliant with the EPS.¹⁸

The 2010 RSC PPAs meets the conditions for EPS compliance because they are for intermittent generation with a capacity factor less than 60 percent, whose generation will be delivered into California.¹⁹

The proposed RSC PPAs meet the conditions for EPS compliance established in D.07-01-039 because the facilities will produce electricity at a capacity factor of less than 60 percent and are therefore not a baseload power plant as defined in Public Utilities Code Section 8340(a).

¹⁷ "Baseload generation" is electricity generation at a power plant "designed and intended to provide electricity at an annualized plant capacity factor of at least 60%." Pub. Utils. Code § 8340 (a).

¹⁸ D.07-01-039, Attachment 7, p. 4

¹⁹ D.07-01-039, Attachment 7, p. 7

Cost Reasonableness

SCE evaluated projects bid into the 2010 RSC based on the levelized price of the contracts and the ability to achieve COD within three years of approval. The final executed offers were the lowest priced projects deemed viable at the time of execution. The IE reviewed contract prices, comparing bid prices to 2009 RSC contracts, and concluded that the RSC PPAs are reasonable relative to other restrictions in the bidding process.²⁰ The IE also found that the contracts were competitive to those on the 2009 RPS RFP shortlist.²¹

To evaluate whether the RSC contract prices are reasonable, staff compared the RSC contract prices to SCE's 2009 executed PPAs, the 2011 RPS solicitation and short-listed bids, and PPAs of similar technology and configuration. This includes the PPAs approved by the Commission in October 2010 as part of SCE's SPVP.

Levelized contract prices for the 2010 RSC are lower than the prices for almost all of the solar PV bids received in SCE's 2009 RPS solicitation. Prices are also lower than all of the executed solar PV contracts from the 2009 RPS solicitation. Furthermore, prices of the RSC contracts are all lower than all of the ground-mounted solar PV projects signed through SCE's 2010 SPVP program.

The 2010 RSC contract prices are very competitive compared to the solar PV projects on SCE's 2011 recommended shortlist from its 2011 RFO.

²⁰ AL 2547-E, Appendix C, at page 30-31.

²¹ AL 2547-E, Appendix C, at page 30-31.

Lastly, all contract prices are below the 2009 Market Price Referent (MPR) of \$108.98/MWh, which represents the 2009 MPR for projects with a 20 year contract length and 2013 online date.²²

See Confidential Appendix B for price comparisons between 2010 RSC PPAs and other bids and recently executed renewable contracts.

The total expected costs of the RSC PPAs are reasonable based on their relation to SCE's other RPS-eligible offers and recently executed PPAs in SCE's 2009 RSC RFO, 2011 RSC RFO, and the 2010 SPVP. Payments made by SCE under the PPAs are fully recoverable in rates over the life of the PPAs, subject to Commission review of SCE's administration of the PPAs.

Procurement Review Group (PRG) Participation

The Procurement Review Group (PRG) process was initially established in D.02-08-071 as an advisory group to review and assess the details of the IOUs' overall procurement strategy, solicitations, specific proposed procurement contracts and other procurement processes prior to submitting filings to the Commission as an interim mechanism for procurement review.

Participants in the Procurement Review Group include representatives from the CPUC's Energy and Legal Divisions, the Division of Ratepayer Advocates, The Utility Reform Network, the Natural Resources Defense Council, California Utility Employees, the Union of Concerned Scientists, and the California Department of Water Resources.

On September 29, 2010, SCE briefed its PRG on the offers received for the 2010 RSC Program. On November 10, 2010, SCE updated its PRG concerning the status of its 2010 RSC contracts.

²² The 2009 MPR is the most current MPR available; CPUC did not issue a 2010 MPR.

SCE states that it consulted with its PRG during each step of the renewable procurement process, including by providing access to solicitation materials and pro forma contracts for review and comment before commencing the RFP, informing the PRG of the initial results of the RFP, explaining the evaluation process, and updating the PRG periodically concerning the status of contract formation.

Pursuant to D.02-08-071, SCE's Procurement Review Group participated in the review of 2010 RSC PPAs, and SCE has complied with the Commission's rules for involving the PRG.

Independent Evaluator (IE) Requirements

SCE retained an IE, Merrimack Energy Group, Inc. (Merrimack Energy), to report to SCE's Procurement Review Group about the 2010 RPS RFO and bilateral contracts executed in 2010. According to the IE Report submitted in AL 2547-E, Merrimack Energy performed its duties overseeing the RSC RFO and has provided assessment reports to the Commission. The IE compared the RSC projects to bids in SCE's 2009 RPS solicitation. The IE concluded that SCE's offer selection decisions "were reasonable and were based on the requirements and evaluation criteria set forth in the RFO Participant Instructions."²³ The IE found that the selected offers and executed contracts "were the result of a competitive solicitation process with a highly robust response."²⁴ Finally, the IE found that "SCE was fair and reasonable to all Offerors and acted in an unbiased fashion."²⁵

Consistent with D.06-05-039, an independent evaluator (IE) oversaw SCE's RPS procurement process. Additionally, the IE reviewed the proposed contracts and compared the proposals to the results of the most recent bids received consistent with D.09-06-050.

²³ AL 2547-E, Appendix C, page 31.

²⁴ AL 2547-E, Appendix C, page 31.

²⁵ AL 2547-E, Appendix C, page 31.

Compliance with the Minimum Standard Conditions

D.07-05-028 establishes a “minimum quantity” condition on the ability of utilities to count a contract of less than 10 years duration with an existing facility for compliance with the RPS program. In the calendar year that a short-term contract with an existing facility is executed, the utility must also enter into long-term contracts with new facilities equivalent to at least 0.25% of the utility’s previous year’s retail sales.

As new facilities, delivering pursuant to a contract greater than 10 years in length, the 2010 RSC contracts will contribute to SCE’s minimum quantity requirement established in D.07-05-028.

CONFIDENTIAL INFORMATION

The Commission, in implementing Public Utility Code Section 454.5(g), has determined in D.06-06-066, as modified by D.07-05-032, that certain material submitted to the Commission as confidential should be kept confidential to ensure that market sensitive data does not influence the behavior of bidders in future RPS solicitations. D.06-06-066 adopted a time limit on the confidentiality of specific terms in RPS contracts. Such information, including price, is confidential for three years from the date the contract states that energy deliveries begin, except contracts between IOUs and their affiliates, which are public.

The confidential appendices, marked “[REDACTED]” in the public copy of this Resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.

RPS ELIGIBILITY AND CPUC APPROVAL

Pursuant to Public Utility Code Section 399.13, the CEC certifies eligible renewable energy resources. Generation from a resource that is not CEC-certified cannot be used to meet RPS requirements. To ensure that only CEC-certified energy is procured under a Commission-approved RPS contract, the Commission has required standard and non-modifiable “eligibility” language in

all RPS contracts. That language requires a seller to warrant that the project qualifies and is certified by the CEC as an “Eligible Renewable Energy Resource,” that the project’s output delivered to the buyer qualifies under the requirements of the California RPS, and that the seller uses commercially reasonable efforts to maintain eligibility should there be a change in law affecting eligibility.²⁶

The Commission requires a standard and non-modifiable clause in all RPS contracts that requires “CPUC Approval” of a PPA to include an explicit finding that “any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 et seq.), Decision 03-06-071, or other applicable law.”²⁷

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, nor can the Commission determine prior to final CEC certification of a project, that “any procurement” pursuant to a specific contract will be “procurement from an eligible renewable energy resource.”

Therefore, while we include the required finding here, this finding has never been intended, and shall not be read now, to allow the generation from a non-RPS-eligible resource to count towards an RPS compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain CEC certification, or the utility of its obligation to pursue remedies for breach of contract. Such contract enforcement activities shall be reviewed pursuant to the Commission’s authority to review the administration of such contracts.

²⁶ See, e.g. D. 08-04-009 at Appendix A, STC 6, Eligibility.

²⁷ See, e.g. D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

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 on November 14, 2011 and timely comments were filed by SCE on December 5, 2011.

SCE objected to the additional reporting requirement included in the Draft Resolution. The resolution requires SCE to file a Tier 1 advice letter providing an update on the status of each project that has not reached its COD. SCE argues that this additional reporting requirement is duplicative of processes already in place. SCE cites the “regular meetings with SCE, [in which] Energy Division is apprised of project milestones,” as well as its semi-annual Project Development Status Report.

Staff elects not to adopt SCE’s recommendation to remove this requirement. This requirement is established to provide a public filing, better align the RSC contracts with the RAM and SPVP programs, and help ensure that projects are meeting their CODs.

FINDINGS AND CONCLUSIONS

1. The 2010 Renewables Standard Contract Power Purchase Agreements are consistent with SCE’s 2009 Renewables Portfolio Standard Procurement Plan, approved by D.09-06-018 and subsequently amended by SCE
2. The terms and conditions in the Power Purchase Agreements comply with the non-modifiable terms required in Renewables Portfolio Standard contracts as set forth in D.08-04-009, D.08-08-028, and D.10-31-021, as modified by D.11-01-025.

3. The 2010 RSC projects have met the relevant criteria for eligibility established in D.10-12-048, or the Renewable Auction Mechanism (RAM) Decision, and SCE's Solar Photovoltaic Program (SPVP).
4. The 2010 RSC projects have met most of the relevant benchmark criteria for project viability established in D.10-12-048, or the RAM Decision, and the SPVP programs.
5. The proposed 2010 RSC contracts conform with the project development security requirements used in the RAM and SPVP programs.
6. SCE may count the fifteen contracts approved herein towards its capacity cap under the RAM program. SCE may not count the five terminated contracts towards the RAM capacity cap.
7. The proposed Renewables Standard Contract Power Purchase Agreements meet the conditions for Emission Performance Standard compliance established in D.07-01-039 because the facilities will produce electricity at a capacity factor of less than 60 percent and are therefore not a baseload power plant as defined in Public Utilities Code Section 8340(a).
8. The total expected costs of the Renewables Standard Contract Power Purchase Agreements are reasonable based on their relation to SCE's other Renewables Portfolio Standard-eligible offers and recently executed Power Purchase Agreements in SCE's 2009 Renewables standard Contracts Request For Offers, 2011 Renewables Standard Contracts Request For Offers, and the 2010 Solar Photovoltaic Program. Payments made by SCE under the Power Purchase Agreements are fully recoverable in rates over the life of the Power Purchase Agreements, subject to Commission review of SCE's administration of the Power Purchase Agreements.
9. Pursuant to D.02-08-071, SCE's Procurement Review Group participated in the review of the 2010 Renewables Standard Contract Power Purchase Agreements, and SCE has complied with the Commission's rules for involving the Procurement Review Group.
10. Consistent with D.06-05-039 an Independent Evaluator oversaw SCE's Renewables Standard Contract procurement process. Additionally, the Independent Evaluator reviewed the proposed contracts and compared

the proposals to the results of the most recent bids received consistent with D.09-06-050.

11. As new facilities, delivering pursuant to a contract greater than 10 years in length, the 2010 Renewables Standard Contracts will contribute to SCE's minimum quantity requirement established in D.07-05-028.
12. The confidential appendices, marked "[REDACTED]" in the public copy of this Resolution, as well as the confidential portions of the advice letter, should remain confidential at this time.
13. 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.
14. The immediately preceding finding shall not be read to allow the generation from a non-Renewables Portfolio Standard-eligible resource to count towards a Renewables Portfolio Standard compliance obligation. Nor shall such finding absolve the seller of its obligation to obtain California Energy Commission certification, or SCE of its obligation to pursue remedies for breach of contract.
15. On December 5, 2011, timely comments were submitted in response to Draft Resolution E-4445 by Southern California Edison. These comments are disposed of in this resolution.
16. Advice Letter 2547-E and 2547-E-A should be approved effective today.

THEREFORE IT IS ORDERED THAT:

1. The fifteen renewable energy power purchase agreements listed in Appendix A, executed pursuant to Southern California Edison Company's 2010 Renewables Standard Contract Program submitted in Advice Letters 2547-E and 2547-E-A, are approved without modification.
2. Within thirty days of the projects' thirty-six month online deadline, SCE shall file a Tier 1 advice letter providing an update on the status of each

project that has not reached commercial operation. If SCE grants an extension, the advice letter should adequately demonstrate the merits for granting the extension and provide the expected new online date.

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 15, 2011; the following Commissioners voting favorably thereon:

Paul Clanon
Executive Director

Appendix A

Approved 2010 Renewables Standard Contract Program Power Purchase Agreements

Table 1. Approved 2010 RSC Contracts

Seller	Parent Company	Generation Type	Contract Capacity (MW AC)	Estimated Annual Energy (GWh)	Forecasted Initial Operation Date	Term of Years	Location
Lancaster Dry Farm Ranch B LLC	Silverado	Solar PV	5.0	12.2	4/2014	20	Lancaster, CA
Lancaster WAD B LLC	Silverado	Solar PV	5.0	12.4	4/2014	20	Lancaster, CA
Central Antelope Dry Ranch B LLC	Silverado	Solar PV	5.0	10.2	4/2014	20	Lancaster, CA
Victor Dry Farm Ranch A LLC	Silverado	Solar PV	5.0	10.3	4/2014	20	Lancaster, CA
Victor Dry Farm Ranch B LLC	Silverado	Solar PV	5.0	10.3	4/2014	20	Victorville, CA
Sierra View Solar V LLC	Juwi Solar	Solar PV	19.0	50.0	12/2013	20	Mohave, CA
Sierra View Solar IV LLC	Juwi Solar	Solar PV	19.0	49.4	12/2013	20	Lancaster, CA
Nicolis, LLC	Foresight Renewables	Solar PV	20.0	50.1	9/2013	20	Weldon, CA
Blythe Solar Power Generation Station 1, LLC	Amonix	Solar PV	4.7	12.2	6/2013	20	Blythe, CA
Littlerock Solar Power Generation Station 1, LLC	Amonix	Solar PV	5.0	13.6	4/2013	20	Littlerock, CA

Seller	Parent Company	Generation Type	Contract Capacity (MW AC)	Estimated Annual Energy (GWh)	Forecasted Initial Operation Date	Term of Years	Location
Garnet Solar Power Generation Station 1, LLC	Amonix	Solar PV	4.8	11.3	6/2013	20	North Palm Springs, CA
Lucerne Solar Power Generation Station 1, LLC	Amonix	Solar PV	14.0	37.6	3/2014	20	Lucerne Valley, CA
Tropico, LLC	Foresight Renewables	Solar PV	14.0	36.2	9/2013	20	Rosamond, CA
Clear Peak Energy, Inc.	Clear Peak Energy	Solar PV	8.5	23.6	12/2013	20	Rosamond, CA
RE Columbia 3, LLC	Recurrent Energy	Solar PV	10	24.9	1/2014	20	Mohave, CA

Confidential Appendix B

Cost Reasonableness of SCE's 2010 Renewables Standard Contract Program Power Purchase Agreements

[REDACTED]

Confidential Appendix C

Project Viability of SCE's 2010 Renewables Standard Contract Program Power Purchase Agreements

[REDACTED]