PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Item #24
ID #10918

ENERGY DIVISION **RESOLUTION E-4438**
February 1, 2012

REDACTED

R E S O L U T I O N

Resolution E-4438. Southern California Edison Company requests approval of a power purchase agreement with Silver State Solar Power South, LLC.

PROPOSED OUTCOME: This Resolution approves cost recovery for the long-term renewable energy power purchase agreement between Southern California Edison Company and Silver State Solar Power South, LLC, a wholly-owned subsidiary of First Solar, Inc.

ESTIMATED COST: Actual costs are confidential at this time.

By Advice Letter 2581-E filed on May 6, 2011.

SUMMARY

Southern California Edison Company's renewable energy power purchase agreement with Silver State Solar Power South, LLC is approved without modification.

Southern California Edison Company (SCE) filed Advice Letter (AL) 2581-E on May 6, 2011 requesting approval of a 20 year Purchase Power Agreement (PPA) with Silver State Solar Power South, LLC ("Silver State" or "Project"), a wholly-owned subsidiary of First Solar, LLC, which resulted from bilateral negotiations.

SCE proposes that the 250 megawatt (MW) photovoltaic facility will interconnect into the California Independent System Operator (CAISO) balancing authority area at the proposed Ivanpah Susbstation, which will be built as part of the approved Elorado-Ivanpah Transmission Project. The Project will deliver

approximately 613 gigawatt-hours (GWh) per year of Category 1 renewable energy with a commercial operation date
of May 31, 2017.

This resolution approves the PPA without modification. SCE's execution of this power purchase agreement is consistent with SCE's 2009 RPS Procurement Plan, including its resource need, which the Commission approved in Decisions 09-06-018 and 11-04-030. Deliveries under the PPA are fully recoverable in rates over the life of the contract, subject to Commission review of SCE's administration of the power purchase agreement.

The following table summarizes the Project-specific features of the agreement:

Generating Facility	Type	Term Years	MW Capacity	Annual Deliveries	Online Date	Project Location
Silver State Solar Power South	Solar PV	20	250	613 GWh	May 31, 2017	Clark County, NV

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 Public Utilities Code §§ 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 that 33 percent of

[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] All citations to sections (§) are to the Public Utilities Code of the state of California unless otherwise specified.

retail sales are served by eligible renewable energy resources no later than December 31, 2020.[3]

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.

NOTICE

Notice of AL 2581-E was made by publication in the Commission's Daily Calendar. Southern California Edison Company states that a copy of the Advice Letter was mailed and distributed in accordance with §3.14 of General Order 96-B.

PROTESTS

Advice Letter AL 2581-E was not protested.

DISCUSSION

Southern California Edison Company requests Commission approval of a new renewable energy contract with Silver State Solar Power South, LLC.

On May 6, 2011 Southern California Electric Company (SCE) filed Advice Letter (AL) 2581-E. In AL 2581-E, SCE requested Commission approval of a renewable energy contract with Silver State Solar Power South, LLC ("Silver State" or "Project"), a wholly-owned subsidiary of First Solar, LLC, for generation from its proposed photovoltaic facility.

The 250 megawatt (MW) solar photovoltaic (PV) project was first bid into the 2009 RPS solicitation by the original project developer, NextLight Renewable Power (NextLight), but was not chosen because it was not competitively priced. In September 2010, SCE received a bilateral proposal from First Solar after it had acquired the Project though its purchase of NextLight. First Solar lowered the

[3] § 399.15(b)(2)(B).

price of the Project and SCE determined that Silver State was competitively priced and decided to execute a contract after those negotiations.

The Project will be located in Clark County, NV and interconnect into the California Independent System Operator (CAISO) balancing authority area (BAA) at the proposed Ivanpah Susbstation, which will be built as part of the Eldorado-Ivanpah Transmission Project. The Commission approved the Eldorado-Ivanpah Transmission Project in December 2010 and funding has already been approved and allocated. The Silver State Project will deliver approximately 613 gigawatt-hours (GWh) per year of Category 1 renewable energy with a commercial operation date (COD) of May 31, 2017 for a term of 20 years. First Solar will provide the solar modules for the Project and will be mounted as part of a fixed tilt system.

SCE requests that the Commission issue a resolution containing the following findings:

1. Approval of the Silver State Contract in its entirety;
2. A finding that any electric energy sold or dedicated to SCE pursuant to the Silver State Contract constitutes procurement by SCE from ERRs 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 Silver State 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 Silver State 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 Silver State Contract counts, in full and without condition, towards the requirement in the RPS Legislation that SCE procure 20 percent (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 Silver State Contract, and SCE's entry into the Silver State Contract, is reasonable and prudent for all purposes, including, but not limited to, recovery in rates of payments made pursuant to the Silver State Contract, subject only to further review with respect to the reasonableness of SCE's administration of the Silver State Contract; and
7. Any other and further relief as the Commission finds just and reasonable.

Energy Division Evaluated the PPA on the Following Grounds:

- Consistency with Bilateral Contracting Rules
- Consistency with SCE's 2009 RPS Procurement Plan
- Consistency with RPS Standard Terms and Conditions (STCs)
- Consistency with SCE's least-cost-best-fit (LCBF) requirements
- Cost Containment
- Price Reasonableness and Value
- Project Viability
- Portfolio Need
- Compliance with the Interim Greenhouse Gas Emissions Performance Standard
- Procurement Review Group (PRG) participation
- Independent Evaluator (IE) review
- Compliance with the Minimum Standard Conditions

Consistency with Bilateral Contracting Rules

SCE and Silver State Solar Power South, LLC negotiated the Silver State PPA on a bilateral basis. The developer's initial bid for the project was too high to qualify for SCE's shortlist for the 2009 RPS Solicitation, resulting in SCE negotiating the PPA on a bilateral basis later after the developer lowered its price in September 2010.

In D.06-10-019, the Commission established rules pursuant to which the IOUs could enter into bilateral RPS contracts. SCE adhered to these bilateral contracting rules because the PPA is longer than one month in duration, the PPA was filed by advice letter, the above market costs will not be applied to SCE's

RPS cost limitation and the contracts are reasonably priced, as discussed in more detail below.

In D.09-06-050, the Commission determined that bilateral agreements should be reviewed according to the same processes and standards as projects that come through a solicitation. Accordingly, as described below, the Silver State PPA was compared to other RPS offers received in SCE's 2009 RPS solicitation, bilateral negotiations, and recently executed agreements; the proposed agreement was reviewed by SCE's Procurement Review Group; and an independent evaluator oversaw the project evaluation and PPA negotiation.

The Silver State PPA is consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.

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.[4] The Commission must then accept or reject proposed PPAs based on their consistency with the utility's approved Plan. SCE's stated preferences for projects in its 2009 Plan include projects 1) interconnected to the CAISO BAA and located in California and 2) located near approved transmission infrastructure. The Silver State project, while located in Nevada rather than California, will interconnect to the Commission-approved Eldorado-Ivanpah Transmission Project within the CAISO BAA.

The PPA is consistent with SCE's 2009 RPS Procurement Plan approved by D.09-06-018.

Consistency with RPS Standard Terms and Conditions (STCs)

The Commission adopted a set of standard terms and conditions (STCs) required in RPS contracts, four of which are considered "non-modifiable." The STCs were compiled in D.08-04-009 and subsequently amended in D.08-08-028. More

[4] §399.14.

recently in D.10-03-021, as modified by D.11-01-025, the Commission further refined these STCs.

The PPA includes the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.

Consistency with SCE's Least-Cost Best-Fit (LCBF) Requirements

In D.04-07-029, the Commission directs the utilities to use certain criteria in their LCBF selection of renewable resources.[5] The decision offers guidance regarding the process by which the utility ranks bids in order to select or "shortlist" the bids with which it will commence negotiations. As described in its 2009 RPS Procurement Plan, SCE's approved process for identifying LCBF renewable resources focuses on four primary areas:

1. Determination of market value of bid,
2. Calculation of transmission adders and integration costs,
3. Evaluation of portfolio fit, and
4. Consideration of non-price factors.

SCE negotiated the Silver State PPA bilaterally and therefore it did not compete directly with other RPS projects. In AL 2581-E, SCE explains that it examined the reasonableness of the PPA using the same LCBF methodology used to evaluate the 2009 RPS Solicitation and with other bilateral contracts offered to SCE during the same time period that the Silver State PPA was executed. Additionally, as part of a project viability assessment, SCE examined such factors as ownership experience, operations & maintenance experience, and technological feasibility.

The Silver State PPA was evaluated consistent with the Least-Cost Best-Fit requirements identified in SCE's 2009 RPS Procurement Plan.

Cost Containment

At the time SCE executed the Silver State contract and submitted AL 2581-E, RPS cost containment was set out in §399.15(c) (SB 107) and based on a market price

[5] *See* §399.14(a)(2)(B).

referent (MPR) to assess whether a proposed RPS contract has above-market costs. Energy Division staff evaluated the Silver State contract consistent with the Commission's rules in effect when AL 2581-E was submitted.[6]
Based on the Silver State project's commercial operation date, SCE estimates that the price of the PPA is below the applicable 2009 Market Price Referent[7].

Price Reasonableness and Value

The Silver State project was negotiated as a bilateral contract after the close of the 2009 RPS Solicitation. The contract was executed in February 2011, over a year after the 2009 solicitation. Therefore, the proper contracts against which the Silver State contract should be measured are those contracts executed during the same time period that it was negotiated and executed, or approximately the first quarter of 2011. The project is also reasonable when compared against the pricing and other standards used for evaluating contracts resulting from SCE's 2009 RPS Solicitation. See Confidential Appendix A for a discussion on the price reasonableness and value of the Silver State contract.

The Commission finds that the price and value of the Silver State PPA is reasonable and competitive with other contracts offered to SCE during the period that the Silver State PPA was negotiated and executed. Payments made by SCE under the Silver State PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of SCE's administration of the PPA.

[6] SB 2 (1X) became effective on December 10, 2011. The Commission is implementing a new cost containment framework in Rulemaking 11-05-005.

[7] *See* Resolution E-4298.

Project Viability

First Solar is an experienced, fully-integrated manufacturer and installer of thin-film solar PV panels and has over 1,000 MW of solar panels currently installed and operating around the world, including development experience in California. The project will utilize proven and mature solar PV technology.

The developer has initiated site control and permits are on target for the May 31, 2017 COD. Moreover, the project will interconnect at the proposed Ivanpah Substation, within the CAISO BAA, a project approved by the Commission in December 2010.

The Silver State project has achieved several critical milestones despite its May 31, 2017 COD. See Confidential Appendix A for a discussion on the viability of the Silver State project.

Portfolio Need

As a resource with commercial deliveries expected in 2017 and beyond, this project represents a good fit for SCE's long-term renewable procurement needs. The need for incremental RPS compliant renewable generation is based on SCE's projected RPS position for all three compliance periods established under SB2 (1X). When adjusting SCE's RPS portfolio to account for a certain amount of project failure, the need requirements for SCE to meet its RPS compliance requirements fall in the second half of this decade which coincides with the third compliance period and when the Silver State contract is forecast to come online.

Therefore, projected generation from the Silver State contract meets the need requirements of SCE's RPS portfolio. See Confidential Appendix A for a discussion on SCE's need requirements and portfolio fit.

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

California Public Utilities Code §§ 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.[8] Generating facilities using certain renewable resources are deemed compliant with the EPS.[9]

The Silver State contract meets the conditions for EPS compliance because it is for intermittent generation with a capacity factor less than 60 percent, whose generation will be delivered into California.[10]

The proposed PPA meets the conditions for EPS compliance established in D.07-01-039 because the facility will produce electricity at a capacity factor of less than 60 percent and is therefore not a baseload power plant as defined in Public Utilities Code §8340(a).

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 December 20, 2010, SCE briefed the PRG concerning the Silver State contract.

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[8] "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%." § 8340(a).

[9] D.07-01-039, Attachment 7, p. 4

[10] D.07-01-039, Attachment 7, p. 7

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

Independent Evaluator (IE) Review

Sedway Consulting, Inc. provided a Statement of Independent Evaluator for AL 2581-E. The Independent Evaluator monitored virtually all of the significant negotiation calls between First Solar and SCE during 2008-2011, and monitored the back-and-forth exchange of negotiation emails and associated redlined contracts. Sedway Consulting also participated in the Silver State PPA discussions in SCE's Procurement Review Group (PRG) in December 2010. The IE also reviewed drafts of SCE's advice letter filing for the PPA. The IE concluded there is no material deficiency in the PPA that should warrant CPUC disapproval.

Consistent with D.06-05-039 and D.09-06-050, an independent evaluator oversaw SCE's negotiations with Silver State Solar Power South, LLC and recommends the Silver State contract be approved without reservation. See Confidential Appendix C for the Independent Evaluator's summary comments on AL 2581-E.

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 a new facility, delivering pursuant to a contract greater than 10 years in length, the Silver State contract will contribute to SCE's minimum quantity requirement established in D.07-05-028.

CONFIDENTIAL INFORMATION

The Commission, in implementing Pub. Util. Code § 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, such as 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 Pub. Util. Code § 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.[11]

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* §§ *399.11 et seq.*), Decision 03-06-071, or other applicable law."[12]

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[11] *See, e.g.* D. 08-04-009 at Appendix A, STC 6, Eligibility.

[12] *See, e.g.* D. 08-04-009 at Appendix A, STC 1, CPUC Approval.

Notwithstanding this language, the Commission has no jurisdiction to determine whether a project is an eligible renewable energy resource, neither 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 utilities' administration of contracts.

COMMENTS

Public Utilities Code §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.

One comment letter was received on December 28, 2011 from Southern California Edison Company requesting standard language that does not substantively change this resolution be added to the Findings and Conclusions section. This language was added per SCE's request.

FINDINGS AND CONCLUSIONS

1. The Silver State PPA is consistent with the bilateral contracting guidelines established in D.06-10-019 and D.09-06-050.
2. The PPA is consistent with SCE's 2009 RPS Procurement Plan approved by D.09-06-018.

3. The PPA includes the Commission-adopted RPS "non-modifiable" standard terms and conditions, as set forth in D.08-04-009, D.08-08-028, and D.10-03-021, as modified by D.11-01-025.
4. The Silver State PPA was evaluated consistent with the Least-Cost Best-Fit requirements identified in SCE's 2009 RPS Procurement Plan.
5. Based on the Silver State contract's projected commercial operation date, SCE estimates that the price of the PPA is below the applicable 2009 Market Price Referent.
6. The price and value of the Silver State PPA is reasonable and competitive with other contracts offered to SCE during the period that the Silver State PPA was negotiated and executed.
7. Payments made by SCE under the Silver State PPA are fully recoverable in rates over the life of the PPA, subject to Commission review of SCE's administration of the PPA.
8. The Silver State project has already achieved several critical milestones despite its May 31, 2017 COD.
9. Projected generation from the Silver State contract meets the need requirements of SCE's RPS portfolio.
10. The PPA meets the conditions for EPS compliance established in D.07-01-039 because the facility will produce electricity at a capacity factor of less than 60 percent and is therefore not a baseload power plant as defined in Public Utilities Code §8340(a).
11. Pursuant to D.02-08-071, SCE's Procurement Review Group participated in the review of the Silver State contract, and SCE has complied with the Commission's rules for involving the PRG.
12. Consistent with D.06-05-039 and D.09-06-050, an Independent Evaluator (IE) oversaw SCE's negotiations with Silver State Solar Power South, LLC and recommends the Silver State contract be approved without reservation.
13. As a new facility, delivering pursuant to a contract greater than 10 years in length, the Silver State contract will contribute to SCE's minimum quantity requirement established in D.07-05-028.

14. 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.
15. Procurement pursuant to the PPA is procurement from an eligible renewable energy resource for purposes of determining SCE'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.), D.03-06-071 and D.06-10-050, or other applicable law.
16. The immediately preceding finding shall not be read to allow generation from a non-RPS eligible renewable energy resource under the PPA to count towards an RPS compliance obligation. Nor shall that finding absolve SCE of its obligation to enforce compliance with the PPA.
17. Timely comments from Southern California Edison Company were received on December 28, 2011 and disposed of in this Resolution.
18. The Silver State power purchase agreement should be approved in its entirety.
19. AL 2581-E should be approved effective today without modification.

THEREFORE IT IS ORDERED THAT:

1. The power purchase agreement between Southern California Edison Company and Silver State Solar Power South, LLC proposed in Advice Letter 2581-E is approved without modification.

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 February 1, 2012; the following Commissioners voting favorably thereon:

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PAUL CLANON
Executive Director

Confidential Appendix A

Price Reasonableness, Value, RPS Portfolio Need and Project Viability

[REDACTED]

Confidential Appendix B

Contract Terms and Conditions

[REDACTED]

Confidential Appendix C

Independent Evaluator Report's Conclusion

[REDACTED]