

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Item #51
ID #9057
RESOLUTION E-4299
January 21, 2010

R E S O L U T I O N

Resolution E-4299. Southern California Edison Company.

PROPOSED OUTCOME: This Resolution implements Southern California Edison Company's Solar Photovoltaic Program. Specifically, this Resolution adopts (1) a competitive solicitation process, protocols and eligibility criteria, (2) a standard power purchase agreement, and (3) annual compliance reporting requirements.

ESTIMATED COST: Actual costs are unknown at this time. Costs for any single power purchase agreement shall not exceed \$260 per megawatt hour.

By Advice Letter 2364-E filed on July 20, 2009.

SUMMARY

This resolution implements Southern California Edison Company's (SCE) Solar Photovoltaic Program (SPVP or Program). The SPVP is a five-year program adopted by the California Public Utilities Commission (Commission) in Decision (D.) 09-06-049 to spur the development of distributed solar photovoltaic (PV) projects in SCE's service territory, primarily commercial rooftop projects in the one to two megawatt (MW) range.

This resolution addresses the competitively bid portion of the Program, and adopts a competitive solicitation process, Program eligibility criteria, Program administration protocols and a standard power purchase agreement for use in the SPVP. This resolution also establishes a process to facilitate Program refinements throughout the Program period. Finally, this resolution sets forth the annual compliance reporting requirements for the Program.

This Program - given its magnitude and its utility-based implementation - is the first of its kind. It is reasonable to expect market, technical and regulatory challenges to arise as the Program is implemented. Accordingly, this resolution implements the Program in a manner intended to be sufficiently flexible to accommodate lessons learned as we gain experience with interconnecting large amounts of new system-side solar PV projects at the distribution level.

BACKGROUND

On March 27, 2008, SCE filed Application (A.) 08-03-015 seeking authorization for a five-year program to install, own and operate up to 250 megawatts (MW) of one to two MW solar PV facilities on commercial rooftops in its service territory.

On June 18, 2009, the Commission approved SCE's SPVP, with modifications, in D.09-06-049. The Commission determined that SCE's SPVP would complement current programs and initiatives, "to advance the state's renewable energy goals and help lower the cost of solar energy."¹ In D.09-06-049, the Commission authorized SCE to build, own and operate 250 MW of one to two MW solar PV facilities on commercial rooftops in its service territory. The decision also ordered SCE to execute contracts for 250 MW of generation from similar facilities owned and maintained by independent power producers (IPP) through a competitive solicitation process. D.09-06-049 ordered SCE to file an advice letter, "...delineating the criteria for selection of the bids, and containing a draft standard 20-year PPA contract" for the IPP portion of the Program.

On July 20, 2009 SCE filed AL 2364-E. In AL 2364-E, SCE requested that the Commission issue a resolution that approves the process and criteria for evaluating offers received pursuant to competitive solicitations and approves a standard 20-year power purchase agreement (PPA). On July 31, 2009, Energy Division staff held a workshop where SCE presented the competitive solicitation process and draft standard PPA outlined in AL 2364-E.

¹ D.09-06-049, pages 2-3.

NOTICE

Notice of AL 2364-E was made by publication in the Commission's Daily Calendar. SCE states that a copy of the Advice Letter was mailed and distributed in accordance with Section IV of General Order 96-B.

PROTESTS

The Commission received protests and responses to AL 2364-E.

SCE's AL 2364-E was timely protested by the Division of Ratepayer Advocates (DRA), Independent Energy Producers Association (IEP), Recurrent Energy (Recurrent), California Solar Energy Industries Association (CALSEIA), CALifornians for Renewable Energy (CARE), Solutions for Utilities, Inc (Solutions) and jointly by Intertie Corporation, FIT Coalition, Solar Power Development Partners LLC, and RightCycle (collectively SPP), on August 10, 2009. Also on August 10, 2009, timely responses to AL 2364-E were filed by National Energy Solutions (National Energy) and jointly by the Solar Alliance and Vote Solar Initiative (Joint Solar Parties). On August 17, 2009, a late filed response was filed by the Coalition of California Utility Employees (CUE).

SCE replied to parties' protests and responses, on August 17, 2009.

DISCUSSION

Implementation of SCE's SPVP includes establishing a SPVP program forum, a competitive solicitation framework, eligibility criteria, standard contract terms and conditions, and a procedural framework for reviewing SPVP contracts. We address each Program component below.

Program Forum

In its response to AL 2364-E, the Joint Solar Parties recommend that SCE convene a Program forum with market participants after the first few solicitations. The Joint Solar Parties believe a Program forum would provide an opportunity for SCE and market participants to revisit elements of the SPVP design that are "too

restrictive or are blocking participation.”² In its reply, SCE affirmed its intent to solicit stakeholder feedback before and after each solicitation.³ Because SCE’s SPVP is a new program, we agree that Program implementation should include a requirement for SCE to provide stakeholders an opportunity to propose refinements to the Program’s remaining solicitations.

Within 60 days of each solicitation’s closing date, SCE will convene a Program forum to identify Program components that may need refinement.⁴ Then, based on the results of each Program forum and in consultation with Energy Division, SCE will file an advice letter seeking modifications to the Program adopted by this resolution. The Independent Evaluator should also participate in the Program forum. We address the use of an Independent Evaluator in the “SPVP Solicitation Framework” section below.

SPVP Solicitation Framework

Request for Offers (RFO) frequency and megawatt amount

In adopting SCE’s SPVP, the Commission ordered SCE to hold at least one solicitation for approximately 50 MW per year, which represents 20 percent of the total Program capacity. The Commission also encouraged SCE to accelerate the development of both the utility-owned and IPP projects if practical and without adversely affecting costs.

The Joint Solar Parties recommend that more than 50 MW be allocated to the first two annual IPP solicitations and fewer in the later years. Specifically, the Joint Solar Parties recommend that SCE solicit 100 MW in year one and 75 MW in year two.⁵ The Joint Solar Parties suggest that front loading the number of MW solicited, rather than having an equal annual allocation, will increase the likelihood for Program success.

² Joint Solar Parties response to AL 2364-E, pages 2-3.

³ SCE reply to protests and responses to AL 2364-E, page 8.

⁴ For example, level of development security required and frequency of solicitations.

⁵ Joint Solar Parties response to AL 2364-E, pages 1-2.

SCE states in its reply that the frequency of RFOs and the megawatts solicited will be based on the 20 percent guideline outlined in D.09-06-049. However, SCE notes that it may reach the Program's 250 MW goal in less than five years, depending on the offers it receives.⁶

We are not persuaded by the Joint Solar Parties that soliciting more megawatts in the initial solicitations is needed to ensure a successful Program. Also, front loading the solicitations to address the concern that the Program will not be fully subscribed would reduce the opportunity for SCE to capture the benefits of lower PV prices anticipated for the later years of the Program. Accordingly, SCE should follow the 20 percent solicitation guidelines set forth in D.09-06-049.

That said, the Joint Solar Parties and Recurrent highlight the need for the Commission to clarify that the success of the Program will be measured in megawatts ultimately developed under the Program and not simply that the Program was carried out for five years.⁷ This Commission expects SCE to take all reasonable measures to see that 250 MW of new solar PV projects are developed by IPPs through this Program.

It is reasonable to expect that some contracted SPVP projects will not achieve commercial operation for one reason or another. Accordingly, SCE shall assume a reasonable level of project failure when determining how many projects should be shortlisted from a SPVP RFO. The megawatts of a failed project or cancelled contract will be added back to the total remaining megawatts sought through the SPVP. Because the SPVP is a five-year program, the final RFO should solicit sufficient megawatts to achieve the program goal of 250 MW of IPP-developed projects.

Location and interconnection information

One of the principal benefits of the SPVP is that it should facilitate the development of new solar PV projects in SCE's service territory, near load and where there is surplus capacity on the existing distribution system. However, in

⁶ SCE reply to protests and responses to AL 2364-E, page 3.

⁷ Recurrent protest to AL 2364-E, page 1.

order to efficiently maximize this benefit, it is necessary for PV developers to have access to information about the available capacity on SCE's distribution system.

D.09-06-049 ordered SCE to "identify locations where distributed solar PV will be desirable, thereby optimizing the locational value of the project sites."⁸ In AL 2364-E, SCE proposed to offer the zip codes of preferred locations and the available capacity for new solar PV generation within each zip code. The information, SCE stated, would be made available and updated as necessary on a Program-dedicated website.

The majority of respondents to AL 2364-E assert that identifying preferred locations by zip code will not provide bidders with adequate information to select a desirable site for development and that more granular information should be provided by SCE.⁹ For example, Joint Solar Parties and DRA recommend that SCE provide the amount of available capacity at the distribution system's circuit level or line segment. DRA asserts that providing more granular preferred location information will facilitate new projects without the need for distribution upgrades, which should result in lower cost projects.¹⁰

In response to parties concerns, SCE offered to identify preferred locations by providing general areas where either growth has occurred or growth is expected in the next few years. SCE will provide geographic areas bounded by landmarks and will note the approximate available distribution capacity in the area.¹¹

Staff sought clarification from SCE regarding the revised proposal. SCE explained that "general areas" will provide interested parties with more granular information than SCE originally proposed since a "general area" will define a geographic area that is smaller than a zip code. Additionally, growth areas are

⁸ D.09-06-049, page 42.

⁹ Solutions, Joint Solar Parties, DRA, SPP and IEP.

¹⁰ DRA protest to AL 2364-E, page 5.

¹¹ AL 2364-E, page 4

more likely to have had recent distribution system upgrades and therefore are more likely to accommodate additional capacity at minimal cost.

Parties' have identified an issue of critical importance and it is clear that more granular information would improve the success of the Program. However, there is insufficient information or analysis to order an alternative solution at this time. Consequently, SCE's revised proposal for identifying preferred locations is adopted for the interim and we will consider revising the protocols governing location and interconnection information in the future based on further review and a better understanding of the type of information SCE can provide.

SCE shall make the preferred location information available on the Program website within 45 days of the effective date of this resolution, and shall update it monthly.

Until such time as the Commission revises the protocols, there are a number of ways to facilitate the implementation of or to improve upon the protocols adopted here.

First, nothing in this resolution shall be read to prevent SCE from proactively making incremental improvements to the quality of the locational information provided for the first solicitation and throughout the Program, and SCE is ordered here to take such steps. For example, SCE should consider providing information about areas where there has been, or there is expected to be, a loss of load which may result in available capacity on the distribution system. SCE should also consider identifying "general areas" where SCE knows for certain that any additional capacity will trigger the need for network upgrades, therefore potentially rendering a project ineligible for the Program. Finally, SCE shall also make such improvements, where appropriate, at the direction of Energy Division Staff.

Second, Program stakeholders shall have an opportunity to revisit what information can be provided to identify preferred locations during the Program forums, and SCE shall proactively undertake all feasible improvements.

Third, Program stakeholders have the ability, pursuant to the Small Generator Interconnection Procedures (SGIP) set forth in SCE's FERC-filed Wholesale Distribution Access Tariff (WDAT) to make informal requests to a designated

SCE employee about a proposed project or specific site. Section 1.2 of the SGIP requires that:

Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies and other material useful to an understanding of an interconnection at a particular point on the Distribution Provider's Distribution System...

We expect SCE has already designated such a representative pursuant to its tariff and will make that information available to Program stakeholders and fully comply with its tariff obligations.

Independent Evaluator

Pursuant to D.09-06-049, SCE is required to have an independent evaluator (IE) oversee the SPVP for the first two years and in any year if a utility affiliate participates in the RFO.

DRA recommends that the Commission require an IE for all five years of the SPVP in order to "enhance transparency and ensure fairness for each RFO."¹² DRA explains that "D.09-06-049 makes an apparent error suggesting that an IE can be introduced into an RFO midstream at the time that a utility affiliate enters an RFO bid," because it is customary for the IE to oversee the entire RFO process.¹³ In response to DRA, SCE states that it only intends to involve an IE as required by D.09-06-049 (*i.e.*, only for the first two years unless a utility affiliate participates in the RFO).¹⁴

Staff agrees with DRA that using an IE for the entirety of the SPVP will increase the transparency of the Program and ensure that the Program is being administered fairly. This approach is consistent with the Commission's guidance for the utilities' competitive procurement activities in general. In its comments on the draft resolution, SCE argued that there was no basis for the use of an IE

¹² DRA protest to AL 2364-E, page 5.

¹³ DRA protest to AL 2364-E, page 6.

¹⁴ SCE reply to protests and responses to AL 2364-E, page 5.

for the full five years. SCE characterized the additional expense as unnecessary. While we appreciate SCE's commitment to maintain costs for this Program, its arguments against the use of an IE are unpersuasive. Furthermore, we note that DRA, who is principally concerned with ratepayer costs, recommends the expanded use of an IE. Therefore, while D.09-06-049 only requires the use of an IE for the first two solicitations, it is reasonable to require IE oversight for all SPVP solicitations.

Multi-round bidding

In AL 2364-E, SCE expressed interest in utilizing a multi-round bidding process for this Program. Parties in their protests and responses to the advice letter oppose a multi-round bidding process. SCE stated in its Reply to parties' protest that it will not pursue a multi-round bidding process for the first RFO. Accordingly, SCE shall not employ a multi-round bidding process at this time. Program stakeholders will have an opportunity to revisit solicitation framework-related issues, including the merits of a multi-round bidding process, during the Program forums.

SPVP Protocols

Response to interconnection requests

IEP recommends that SCE establish a process for responding to interconnection requests.¹⁵ An example would be formalizing how and when SCE would inform a prospective bidder regarding whether a proposed project at a given interconnection point would trigger network upgrades. Solutions, in its protest, asks the Commission to require that SCE provide: SCE staff contact information, responses to interconnection inquiries within 24 hours, interconnection information without fees, and interconnection drawings and cost estimates within 5 business days. SPP and CARE suggested that SCE provide pre-identified interconnection costs.

SCE proposed that SPVP projects would apply for interconnection using the WDAT and Small Generator Interconnection Agreement (SGIA). SCE contends that Solutions' request conflicts with these SCE and CAISO protocols that govern

¹⁵ IEP protest to AL 2364-E, page 2.

interconnection matters. SCE states that interconnection requirements and processes are outside the scope of AL 2364-E.¹⁶

SCE is correct that this resolution is not the appropriate place to reform the interconnection requirements and processes outlined by SCE in AL 2364-E. Also, because interconnection studies are required to determine the costs for interconnecting new “system-side” generation projects, it is not clear how SCE would pre-identify these costs for SPVP projects which will likely be unique to each site. SCE will adhere to established interconnection protocols. SCE’s final Program protocols should clearly describe the interconnection process and protocols under its FERC-filed WDAT, SGIP, and SGIA, and specifically explain how SCE will respond to information and interconnection requests under this Program. As discussed above, Program stakeholders will have an opportunity to revisit interconnection related issues during the Program forums.

Confidentiality

Recurrent protested AL 2364-E, in part, because of concerns regarding SCE treatment of confidential IPP information.¹⁷ Specifically, Recurrent is concerned that project location information given by IPPs to SCE through the interconnection or bidding process could then be shared with SCE’s utility-owned generation (UOG) group, which could then pursue that site. Recurrent argues that the current confidentiality requirements in the standard contract provide an exemption that could allow SCE staff working on the RFO to disclose confidential information to SCE staff working on the UOG. In support of its recommendation, Recurrent states that establishing a firewall between the RFO and UOG portions of the Program is essential to the integrity of the entire Program. Recurrent proposed specific standard contract language to implement such a firewall.

In its reply,¹⁸ SCE asserted that no additional contract provisions are necessary because appropriate protocols are already incorporated into the Program and

¹⁶ SCE reply to protests and responses to AL 2364-E, page 10.

¹⁷ Recurrent protest to AL 2364-E, page 5.

¹⁸ SCE reply to protests and responses to AL 2364-E, page 13.

because, "SCE's internal protocols and structural safeguards are designed to prevent preferential treatment and unfair competitive advantage." SCE stated that RFO information will only be distributed within SCE on a "need to know basis."

It is critical that participants have assurance that the SPVP will be administered fairly and that confidentiality protocols are transparent. Staff agrees with Recurrent that the integrity of the Program will be enhanced by formalizing SCE's confidentiality protocols.

The draft resolution adopted Recurrent's proposal to amend the standard contract. However, in its comments on the draft resolution, SCE correctly points out that confidentiality provisions will be most effective as a Program protocol rather than as a term in the PPA. SCE recommended specific confidentiality protocols for the Program. It is reasonable to adopt SCE's proposal, with minor modifications.

We adopt the following Confidentiality protocol and SCE shall include it in the Tier 1 advice letter filing that delineates the Program protocols and eligibility criteria within 45 days:

Notwithstanding anything to the contrary set forth herein, SCE employees and contractors responsible for or otherwise materially involved in all or part of the Solicitation process or the interconnection process shall not disclose Confidential Information to any SCE employee or contractor working in the Project Development Division.

"Confidential Information" means all oral or written (including electronic) communications exchanged between the Parties on or after the Submission Date as part of, or arising out of, the Proposal and any associated information concerning a related interconnection request (including the fact that Producer has submitted the Proposal and, if applicable, the facts that (i) SCE has short-listed the Proposal, and (ii) the Parties are negotiating the Proposal).

"Project Development Division" means the organization at SCE responsible for, among other things, the implementation of the portion of the Solar PV Program (commonly called utility-owned generation) whereby SCE will own, install, operate and maintain 250MW of

distributed solar PV projects in SCE's service territory, as further described in CPUC Decision 09-06-049.

"Solar PV Program" means SCE's Solar Photovoltaic Program, as adopted by the CPUC in Decision 09-06-049.

"Solicitation" means SCE's request for offers program implementing the portion of the Solar PV Program whereby SCE will solicit competitive bids for power purchase agreements for electricity from 250MW of solar PV generating facilities that are owned, operated and maintained by independent power producers, as further described in CPUC Decision 09-06-049.

"Submission Date" means the date that Producer submits the Proposal to SCE.

SCE employees and contractors covered by the confidentiality protocol shall sign an attestation that they understand and agree to comply with the protocol.

Eligibility Criteria

SCE proposed the following eligibility criteria for the SPVP:

- Projects located within SCE's service territory
- Rooftop projects primarily in the 1 to 2 MW range¹⁹
- Proposed projects must demonstrate site control
- Seller must have sufficient project development experience
- Seller must have a complete interconnection application filed with SCE within ten business days of a shortlist notification
- Project must use a commercially proven solar PV system and use Underwriter Laboratories (UL) rated components
- Levelized cost cannot exceed \$260/MWh for any project

¹⁹ SPVP-eligible projects also include ground-mounted projects, so long as these projects do not exceed 10 percent of the overall program capacity. (D.09-06-049, page 40, fn 48)

- Projects delivering under the SPVP must not participate in the CSI or net energy metering programs
- Projects must be scheduled to begin initial operation within 18 months of PPA execution

SPVP project size

SunEdison and CALSEIA suggest that bidders should be allowed to aggregate several rooftops that individually are smaller than one megawatt, but can be aggregated to meet or exceed the one megawatt criterion, provided that all of the rooftops are on the same p-node.²⁰ The parties suggest that allowing aggregation would greatly expand the pool of potential SPVP project sites and provide an opportunity for smaller, local developers to participate in the Program.²¹

SCE does not oppose this proposal. However, SCE indicates that a project comprised of aggregated sites would be a non-conforming project requiring modification to the standard PPA. SCE explains that a modified PPA could not be filed as a Tier 2 advice letter, the Commission approval process that SCE requests for SPVP PPAs.²²

The proposal to allow aggregation is reasonable. This Commission determined that the SPVP should target project sites that do not have sufficient on-site load to participate in the California Solar Initiative (CSI) program.²³ In order to

²⁰ SunEdison response, pages 1-2; CALSEIA protest, page 6. A “p-node” is a single network Node or subset of network Nodes where a physical injection or withdrawal is modeled and for which a Locational Market Price is calculated and used for financial settlements. *See, e.g.*, <http://www.aiso.com/2457/2457e07768380.pdf>

²¹ SunEdison response to AL 2364-E, page 2.

²² The Tier 2 approval process for SPVP PPAs is an important component of the Program. SCE included a standard PPA with its advice letter filing and requests that CPUC Approval be obtained through a Tier 2 advice letter for all PPAs resulting from each RFO. The use of a Tier 2 advice letter to review a PPA that uses standard terms and conditions is consistent with D.09-06-050, and is appropriate for the SPVP.

²³ D.09-06-049, Conclusions of Law 5.

remain consistent with the market segment the Program seeks to address (i.e., large commercial rooftops), each site must have a Gross Power Rating of at least 500 kW (DC).

Accordingly, SCE shall revise its Program protocols, eligibility criteria and standard PPA, as necessary, to accommodate a single project comprised of the aggregation of multiple sites located within the same p-node, subject to the condition described above, in the Tier 1 advice letter filing ordered herein. .

Project viability calculator

SCE proposed to evaluate SPVP bids using a modified version of the Commission-approved project viability calculator (PVC).²⁴ SCE asserts that the PVC will provide a consistent and fair evaluation of SPVP projects. SCE plans to include a modified PVC in its SPVP RFO bid materials and protocol package.²⁵

SPP opposes the use of the PVC for SPVP. SPP argues that the PVC will create an unlevel playing field and will add uncertainty, inefficiency, and cost to the Program. Recurrent and IEP support using the PVC, and CALSEIA supports its use with specific modifications for the SPVP.

As a practical matter, SCE has already integrated key components of the PVC into the eligibility criteria it proposes for the Program. For example, SCE requires that a project demonstrate site control, the use of commercialized technology, and a minimum level of developer experience. There is also a defined time period for a project to achieve commercial operation. Because the Program includes adequate project viability screens in the “Eligibility Criteria” proposed by SCE and adopted here, there is no need for application of the PVC. Program stakeholders will have an opportunity to revisit project viability-related issues during the Program forums.

Seller’s project development experience

²⁴ In D.09-06-018, the Commission required the use of a project viability calculator to evaluate the relative viability of each bid received in the utilities’ 2009 RPS solicitation.

²⁵ Parties and staff have not had an opportunity to review a copy of the project viability calculator modified for use in the SPVP.

Parties differ on whether SCE's requirement for a minimum of solar PV project development experience is reasonable. Recurrent supports SCE's proposal. Recurrent states that project viability criteria (e.g., developer experience) must be applied to offers in order to ensure that the most viable proposals are selected.²⁶ CALSEIA supports having some minimum requirement for developer experience and it proposed modifications to the criteria used in the project viability calculator, "...to encourage developers, who may not have installed a single large project but have extensive experience..."²⁷ Solutions and National Energy assert that requiring prior development experience will limit the number of IPPs participating in the SPVP. Solutions recommends that SCE not require any development experience from bidders because the Commission did not impose this requirement in D.09-06-049.²⁸

It is important that developers of SPVP projects have some prior development experience. It is in the interest of SCE's customers and for the efficient deployment of the Program. CALSEIA's proposal offers a reasonable balance among the parties' positions and we adopt it as SPVP eligibility criteria. Specifically, the minimum level of developer experience is defined as: The company and/or the development team has completed two or more projects of similar technology and has developed projects of cumulative capacity equal to one megawatt. Program stakeholders will have an opportunity to revisit this issue during Program forums.

Site control

The Joint Solar Parties do not oppose SCE's requirement that qualifying bids demonstrate site control. However, they request some flexibility during the bid evaluation phase. Specifically, the Joint Solar Parties request that SCE allow a bidder to change its site location, provided certain conditions are met. The conditions are that the bidder demonstrates site control for the new site, the

²⁶ Recurrent protest to AL 2364-E, pages 1-2.

²⁷ CALSEIA protest to AL 2364-E, page 5.

²⁸ Solutions protest to AL 2364-E, pages 9-10.

change in site does not impact the Term Start Date, and the new site uses the same interconnection point.²⁹

SCE asserts that a change in site location during the RFO process is not acceptable.³⁰

The Joint Solar Parties' request is reasonable. Therefore, a change in site location during the RFO process will not disqualify an otherwise qualified bid, provided that the conditions set forth above are met. SCE shall establish the process for accommodating a change in site location during the bid evaluation phase and will explain the rule in its SPVP protocols.

SPVP Standard PPA Term and Conditions

Termination right when interconnection requires transmission network upgrades

SCE's proposed standard PPA provides that SCE may terminate an executed SPVP PPA if the interconnection studies reveal that the project will trigger an upgrade to the transmission network. This clause was included in the draft resolution and approved for inclusion in SCE's PPA.

In protests to the advice letter, IEP, CARE and the Joint Solar Parties recommend that SCE complete its interconnection studies prior to executing a PPA, which would then eliminate the need for the termination requirement. These parties assert that the seller should not be subject to having a PPA terminated after having obtained financing and commencing project construction.

Parties continued to object to the clause in comments and reply comments on the draft resolution.³¹

SCE states that the termination provision will protect its customers in the event that network upgrades are required. SCE also states that sellers are in the

²⁹ Joint Solar Parties response to AL 2364-E, page 2.

³⁰ SCE reply to protests and responses to AL 2364-E, page 10.

³¹ Solutions, Vote Solar Initiative, Solar Alliance

position to know the “costs and consequences of interconnection with SCE’s electric system prior to executing the contract.”³² Finally, in response to comments on the draft resolution SCE properly recognizes that a goal of D.09-06-049 is to deploy PV projects quickly “without the need to build new transmission facilities...”³³

Parties have correctly identified a potential timing problem between obtaining complete interconnection studies from SCE and participating in SCE’s RFO process. As an initial matter, this issue highlights the importance of having meaningful preferred location information provided at the outset of the solicitation process. This timing problem may be avoided if the seller files its interconnection request in advance of the RFO so that it knows if its project will trigger network upgrades to the transmission system. However, there is no guarantee that SCE will complete interconnection studies in sufficient time prior to its RFO to inform the sellers’ bids. While the SPVP is intended to optimize use of SCE’s distribution system and speedy deployment of PV projects, we appreciate the market uncertainty identified by parties that such a termination provision could create. The requirement for SPVP projects to begin operation within 18 months appropriately addresses the Program objective to target projects that can be quickly deployed. Consequently, SCE should remove this provision from its standard PPA. Program stakeholders will have an opportunity to revisit this issue during the Program forums.

Development Security

SCE proposed a \$20/kW development security deposit for sellers that have a SPVP PPA. DRA, Recurrent and IEP recommend or suggest that a higher development security amount, \$30/kW, will increase the likelihood of contracting with viable sellers. These parties suggest that project development security can serve as an efficient and effective screen against high risk projects. Solutions recommends that the Commission eliminate the development security requirement because the PPA itself provides a seller with sufficient incentive to complete the project.

³² SCE reply to protests and responses to AL 2364-E, page 10.

³³ SCE reply comments on Draft Resolution, page 2.

In its reply, SCE revised its proposal to require a \$30/kW development security amount, as recommended by DRA, Recurrent and IEP, to encourage viable projects since this amount is consistent with SCE's Renewables Portfolio Standard (RPS) pro forma contract.

It is reasonable to require development security from sellers for the reasons put forth by the parties. However, it is unclear whether the higher amount will provide any additional assurance that a project will be successfully developed. Therefore, the SPVP standard PPA shall require a \$20/kW development security deposit. Program stakeholders will have an opportunity to revisit this issue during Program forums.

Prevailing Wage

SCE's Appendix B-revised standard contract at Section 7.17.1 requires sellers to comply with the prevailing wage requirements established for public works projects under the California Labor Code. Solutions' comments on the draft resolution request that this provision be removed from SCE's standard PPA. Solutions is correct that the Labor Code provision cited in the Appendix B-revised is not applicable to contracts of this type and should not be applied here. SCE shall modify its standard PPA in Appendix B-revised to require sellers to pay prevailing wages to all contractors without reference to the Labor Code provisions or any other specific law, provided that SCE can demonstrate that it imposes no less onerous requirements on its UOG projects.

Standard PPA for projects above 2 MW

SCE requests approval of a standard PPA for SPVP projects up to 2 MW and requests authorization to seek Commission approval for executed SPVP PPAs through the Tier 2 advice letter process. SCE is authorized to execute agreements for larger projects, but SCE explains that projects greater than 2 MW will require additional terms and conditions.

Recurrent recommends that the Commission direct SCE to work with Energy Division staff and parties to develop a standard PPA for projects greater than 2 MW so that all projects eligible for the SPVP may utilize the Tier 2 advice letter

process.³⁴ National Energy and SPP request that all SPVP eligible projects use the standard PPA contemplated for up to 2 MW, without additional terms.³⁵

In response to National Energy's protest, SCE contends that the financial and viability risks increase as project size increases and that PPA terms and conditions are necessary to account for these different risk levels. SCE opposes Recurrent's recommendation to develop a standard PPA for projects greater than 2 MW.

The Commission encouraged SCE to "include in its proposed RFO process a means for expediting Commission review and approval of the resulting contracts, such as the use of Tier 2 advice letters."³⁶ Recurrent's recommendation is consistent with this Commission's guidance. Applying the same uniform contracting and streamlined approval process to all SPVP contracts makes sense and should lower the overall costs of the Program. It is not clear at this time what terms and conditions will need to be modified, if any, for projects greater than 2 MW.³⁷ Accordingly, SCE shall work with Energy Division staff and parties to develop a standard PPA for SPVP projects greater than 2 MW. SCE shall file a draft standard PPA for SPVP projects greater than 2 MW with the Commission in a timeframe that will ensure it is available to use for the second SPVP RFO.

Revised PPA terms and conditions

Parties recommend numerous changes to SCE's draft standard PPA filed in AL 2364-E. SCE in its reply included a revised draft standard PPA, identified as

³⁴ Recurrent protest to AL 2364-E, page 3.

³⁵ National Energy response to AL 2364-E, page 1; SPP protest, pages 3-4.

³⁶ D.09-06-049, pages 42-43.

³⁷ We note that on October 30, 2009 the Commission issued a Ruling seeking information from the utilities about RPS contract terms and conditions. (R.08-08-009) <http://docs.cpuc.ca.gov/efile/RULINGS/109227.pdf>

“Appendix-B revised,” that incorporates changes based on parties’ recommendations.³⁸ We adopt a modified version of SCE’s revised draft standard PPA based on parties comments and D.09-06-049.

We accept these changes filed in SCE’s “Appendix-B revised”

- Force Majeure as an allowable reason to extend Term Start Date
- Clarification of licensing requirements for contractors and electricians
- Eliminate SCE buyout option of projects
- Defining “commercially reasonable efforts” to comply with a change in law concerning RPS eligibility as defined by the California Energy Commission
- Revised assignment term to facilitate project financing, provided the PPA terms and conditions remain intact and enforceable³⁹
- Other non-material changes

We reject these changes filed in SCE’s “Appendix-B revised”:

- Development Security equal to \$30/kw

SCE shall include a revised standard PPA consistent with the direction above in the Tier 1 advice letter filing made within 45 days of the effective date of this resolution.

³⁸ Any reference to SCE’s revised draft standard PPA refers to SCE’s “Appendix B-revised” of its August 17, 2009, Reply of Southern California Edison Company [] to Responses and Protests to Advice Letter 2364-E [].

³⁹ Solar Alliance in comments on the draft resolution request an additional modification to the Assignment term that would permit the seller to assign the PPA without SCE’s consent. We believe that the Assignment term, which states that “...consent will not be unreasonably withheld...”, properly balances the interests of both parties. We do not adopt the requested modification here. Solar Alliance also requested that the Forecasting requirements be removed from the standard PPA. SCE in its reply clarified that the Forecasting requirement applies in more limited circumstances than interpreted by the Solar Alliance. Therefore, SCE can include the Forecasting requirement in the standard PPA at this time.

SPVP Annual Reporting Requirements

Pursuant to D.09-06-049, SCE shall file annual compliance reports on the status of the Program and Energy Division⁴⁰ will summarize the results of the Program in its reports to the legislature on the RPS program. In this manner, lessons learned during the implementation of the Program should be quickly identified and applied to future solicitations.

In comments on the draft resolution, several parties sought clarification whether SCE's annual compliance reports would treat the information as public or confidential.⁴¹ SCE asserts in its reply comments that annual compliance reports will be filed pursuant to Public Utilities Code Section 583, General Order 66-C and D.06-06-066. SCE is correct to file the annual compliance reports consistent with the Commission's confidentiality rules. However, to be clear, all information concerning SCE's UOG projects shall be public and shall be made publicly available and filed unredacted. This resolution also clarifies that SCE will also file its annual compliance reports in the RPS proceeding R.08-08-009, or subsequent proceeding.

The annual report prepared by SCE shall include the following information:

Reporting on competitive IPP portion of the Program

- Documentation of all solicitations issued for PPAs;
- A description of all bids received from the PPA solicitations, including the number of bids received from Women, Minority, and Disabled Veteran Business Enterprises, name of bidder, location of bid, bid price, and description of proposed facility (generating capacity, type of technology, host customer, host tenant, and on-site load), and identification of winning bids;

⁴⁰ D.09-06-049, Ordering Paragraph 4 requires that the first SPVP compliance report shall be filed on July 1, 2010, and subsequent reports filed on July 1 thereafter. The filing of the compliance report does not re-open the proceeding.

⁴¹ Comments were made by DRA, IEP, Solar Alliance, and Vote Solar Initiative.

- The total electrical output for all SPVP systems under PPAs that are currently selling electricity to SCE, for each month of the previous year;
- A description of the distribution and network upgrades generally needed to facilitate the Program, including a listing of those IPP projects identified as triggering the need for network upgrades and those IPP projects rejected from the solicitation or with a PPA terminated because of the need for network upgrades.

Reporting on UOG portion of the Program

- A description of all UOG facilities for which work has been initiated or completed in the previous year, including: participation from Women, Minority, and Disabled Veteran Business Enterprises, capital costs, and operations and maintenance expenses, generating capacity, description of the site (host customer, host tenant, lease cost and on-site load), and progress toward completion;
- A calculation of the levelized cost of energy (LCOE) for each UOG facility that is completed and interconnected to the grid. This calculation shall include workpapers showing actual amounts for all cost and electrical output entries used to calculate the LCOE;
- Electrical output by month for the previous year for each UOG facility that is completed and interconnected to the grid; and
- A complete description of the interconnection upgrades associated with interconnecting each UOG facility, including all distribution and network upgrades, a listing of the UOG projects identified as triggering the need for network upgrades, the UOG projects implemented notwithstanding the need for network upgrades, and the cost of those network upgrades.

Issues raised that are outside the scope of the advice letter

Competitive Solicitation

Pursuant to D.09-06-049, SCE proposed a competitive RFO procurement process in AL 2364-E. At the July 31, 2009 Workshop, SCE described its RFO as a reverse auction, where bidders would compete on price after having met pre-established eligibility criteria.

In their protest to AL 2364-E, CALSEIA objects to SCE's use of a reverse auction.⁴² CALSEIA recommends that SCE use a fixed price contract rather than a competitive procurement process. In its reply, SCE explains that its proposed competitive RFO process (i.e., reverse auction) is fundamentally different from CALSEIA's reference to reverse auctions for utility construction projects where there may be limited competition and selection is based on the lowest price bid received.⁴³

D.09-06-049 clearly states that procurement for the IPP portion of the SPVP should be administered through a competitive process. Accordingly, we deny CALSEIA's protest.

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 17, 2009.

Timely comments were filed by SCE, DRA, IEP, Solutions, Solar Alliance, Vote Solar Initiative and Commercial Solar Solutions, on or before December 7, 2009. On December 14, 2009, timely reply comments were filed by SCE, CALSEIA, CUE and Vote Solar Initiative.

Parties commented on a broad range of issues. All comments and reply comments have been carefully considered. The principal areas of revisions in the text of the draft resolution are noted here.

⁴² CALSEIA protest to AL 2364-E, pages 1-4.

⁴³ SCE reply to protests and responses to AL 2364-E, page 2.

The approach for what location and interconnection information SCE will provide, and the related issue of SCE's right to terminate a PPA if an interconnection study determines that a network upgrade is necessary, has been expanded and clarified.

The mechanism for addressing parties' concerns regarding confidentiality has been revised to apply more broadly, at a programmatic level.

The discussions on the standard PPA and the annual reporting requirement have been expanded and clarified. The adopted standard PPA has been modified.

The time granted to SCE for filing Program documents to fully implement this Program is extended by approximately 30 days.

Additional changes and clarifications have been made to address less significant issues raised by the comments

FINDINGS AND CONCLUSIONS

1. Pursuant to D.09-06-049, which adopted SCE's SPVP, SCE is required to execute contracts with independent power producers through a competitive solicitation process for 250 megawatts of one to two megawatt solar PV facilities on commercial rooftops.
2. Pursuant to D.09-06-049, on July 20, 2009, SCE filed AL 2364-E to implement the competitively bid portion of the SPVP. In AL 2364-E, SCE requests approval of its proposed competitive solicitation process, project evaluations criteria, and a standard 20-year power purchase agreement.
3. On July 31, 2009, Energy Division staff held a workshop where SCE presented to interested parties its proposed competitive solicitation process, eligibility criteria and standard power purchase agreement outlined in AL 2364-E.
4. It is reasonable to require SCE to convene a Program forum within 60 days of each solicitation's closing date to identify Program components that may need refinement as we gain experience with the Program.
5. It is reasonable to consider refinements to the competitive portion of SCE's SPVP we adopt today through the advice letter process.
6. It is reasonable for SCE to hold annual solicitations for 50 MW from SPVP-qualifying projects, pursuant to D.09-06-049.

7. The Commission approved SCE's SPVP to spur the development of distributed solar PV and the Program's success will be measured in megawatts ultimately developed and operating under the Program.
8. It is reasonable to require SCE to take all reasonable measures to see that 250 MW of new solar PV projects are developed by independent power producers through the SPVP, including, assuming some level of project failure when determining how many projects should be shortlisted from a SPVP solicitation.
9. It is reasonable to require that the megawatts of a failed project or cancelled contract will be added back to the total remaining megawatts sought through the SPVP.
10. It is reasonable to require that the final SPVP solicitation solicit sufficient megawatts to achieve the program goal of 250 MW of independent power producer developed projects.
11. Based on currently available information, it is reasonable for SCE to identify preferred locations by providing "general areas" where either growth has occurred or growth is expected in the next few years. The "general areas" will provide geographic areas bounded by landmarks and SCE will identify the approximate available distribution capacity in the area.
12. It is reasonable to require that SCE proactively, and at the direction of Energy Division Staff, make incremental improvements to the quality of the locational information provided for the first solicitation and throughout the Program.
13. Staff is authorized to propose changes to SPVP protocols governing location and interconnection information in the future based on further review and a better understanding of the type of information SCE can provide.
14. An independent evaluator will increase the transparency of the SPVP and will ensure that the program is being administered fairly.
15. It is reasonable to require SCE to employ an independent evaluator for each SPVP solicitation.
16. It is reasonable for SPVP projects to follow interconnection protocols set forth in SCE's FERC-filed Wholesale Distribution Access Tariff, which includes both the Small Generator Interconnection Procedures and the Small Generator Interconnection Agreement.

17. Transparent confidentiality protocols will enhance the integrity of SPVP and will ensure that the program is being administered fairly.
18. It is reasonable to require SCE to include the confidentiality protocols set forth herein in its Tier 1 advice letter filing implementing the Program.
19. It is reasonable to expand the SPVP eligibility criteria to allow for the aggregation of several rooftops that individually are smaller than one megawatt, but can be aggregated to meet or exceed the one megawatt minimum criteria, provided that all of the rooftops are on the same p-node.
20. The SPVP includes adequate project viability screens in the program's eligibility criteria so that an additional project viability assessment is not required.
21. It is reasonable to require a minimum level of developer experience in the Program's eligibility criteria.
22. It is reasonable for a bidder to change its project site location during the solicitation process without disqualification, provided that the bidder demonstrates site control for the new site, the change in site does not impact the Term Start Date, and the new site uses the same interconnection point.
23. Because including a right for SCE to terminate a PPA if interconnecting the project will cause a need for transmission network upgrades will create market uncertainty, and because the requirement for SPVP projects to begin operation within 18 months appropriately addresses the Program objective to target projects that can be quickly deployed, it is reasonable to eliminate this termination right from the standard PPA for this Program.
24. Staff is authorized to propose changes to SPVP protocols governing SCE power purchase agreement termination rights.
25. It is reasonable to require a \$20/kW project development security deposit.
26. It is reasonable to require SCE to develop a draft standard power purchase agreement for SPVP projects greater than 2 MW and for SCE to submit the draft power purchase agreement with the Commission in a timeframe that will ensure it is available to use for the second SPVP solicitation.
27. It is reasonable to accept SCE's modifications to the standard power purchase agreement proposed in Appendix B-revised of SCE's reply to parties protest and responses to Advice Letter 2364-E.
28. It is reasonable for SCE to seek the development of SPVP projects through a competitive solicitation process.

29. AL 2364-E should be approved with modifications.

THEREFORE IT IS ORDERED THAT:

1. Southern California Edison Company's Advice Letter 2364-E, requesting approval of a competitive solicitation process and criteria for 250 megawatts of its Solar Photovoltaic Program and a draft standard power purchase agreement is approved with modifications.
2. Within 45 days of the effective date of this resolution, Southern California Edison Company shall file a Tier 1 advice letter with the Energy Division including a revised standard power purchase agreement that incorporates the modifications adopted by this resolution. Specifically, the standard power purchase agreement should:
 - a. Accommodate a single project comprised of the aggregation of multiple sites located within the same p-node
 - b. Require a \$20/kW project development security amount.
 - c. Modify the Force Majeure term as an allowable reason to extend the Term Start Date as proposed in Appendix B-revised of Southern California Edison Company's Reply to parties protest and responses to Advice Letter 2364-E
 - d. Modify the licensing requirements for contractors and electricians as proposed in section 7.17 of Appendix B-revised of Southern California Edison Company's Reply to parties protest and responses to Advice Letter 2364-E
 - e. Eliminate the buyout option as proposed in Appendix B-revised of Southern California Edison Company's Reply to parties protest and responses to Advice Letter 2364-E
 - f. Define "commercially reasonable efforts" to comply with a change in law concerning RPS-eligibility as defined by the California Energy Commission as proposed in section 15.5 of Appendix B-revised of Southern California Edison Company's Reply to parties protest and responses to Advice Letter 2364-E
3. Within 45 days of the effective date of this resolution, Southern California Edison Company shall file a Tier 1 advice letter with the Energy Division

delineating its SPVP protocols and eligibility criteria. The SPVP protocols and eligibility criteria should include these modifications:

- a. Addition of the confidentiality protocol;
 - b. Clarification that a project may be comprised of aggregated sites with the condition that each site must have a Gross Power Rating of at least 500 kilowatts (direct current).
 - c. A bidder must demonstrate developer experience to meet or exceed this requirement: The company and/or the development team has completed 2 or more projects of similar technology and has developed projects of cumulative capacity equal to 1 megawatt; and
 - d. The process for accommodating a change in site location during the bid evaluation phase of the solicitation.
4. Within 45 days of the effective date of this resolution, Southern California Edison Company shall provide the preferred location information on its website.
 5. Southern California Edison Company shall file annual compliance reports that provide the information, in the manner, set forth in this resolution. Specifically,
 - Reporting on competitive independent power producer portion of the Program
 - Documentation of all solicitations issued for power purchase agreements;
 - A description of all bids received from the power purchase agreements solicitations, including the number of bids received from Women, Minority, and Disabled Veteran Business Enterprises, name of bidder, location of bid, bid price, and description of proposed facility (generating capacity, type of technology, host customer, host tenant, and on-site load), and identification of winning bids;
 - The total electrical output for all systems under power purchase agreements that are currently selling electricity to Southern California Edison Company, for each month of the previous year;
 - A description of the distribution and network upgrades generally needed to facilitate the Program, including a listing of those independent power producer projects identified as triggering the

need for network upgrades and those independent power producer projects rejected from the solicitation or with a power purchase agreement terminated because of the need for network upgrades.

- Reporting on utility-owned generation portion of the Program
 - A description of all utility-owned generation facilities for which work has been initiated or completed in the previous year, including: participation from Women, Minority, and Disabled Veteran Business Enterprises, capital costs, and operations and maintenance expenses, generating capacity, description of the site (host customer, host tenant, lease cost and on-site load), and progress toward completion;
 - A calculation of the levelized cost of energy for each utility-owned generation facility that is completed and interconnected to the grid. This calculation shall include workpapers showing actual amounts for all cost and electrical output entries used to calculate the LCOE;
 - Electrical output by month for the previous year for each utility-owned generation facility that is completed and interconnected to the grid; and
 - A complete description of the interconnection upgrades associated with interconnecting each utility-owned generation facility, including all distribution and network upgrades, a listing of the utility-owned generation projects identified as triggering the need for network upgrades, the utility-owned generation projects implemented notwithstanding the need for network upgrades, and the cost of those network upgrades.

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 January 21, 2010; the following Commissioners voting favorably thereon:

PAUL CLANON
Executive Director