

SCE's Community Renewables – Renewable Auction Mechanism (CR-RAM 4 RFO) Webinar

May 31, 2018

Skype Link:

<https://webmeeting.sce.com/james.barbour/B6JQ4JP9>

Call-in number: (888) 469-1674

Passcode: 7435686

Agenda

- Introduction – Shawn Smith
- CR-RAM Summary – Shawn Smith
- Marketing Material – Mary Hanway
- RFO Details – Ted Herman
- Evaluation & Selection – Steven van Deventer
- Required Documents – Wil Grady

Introduction

Shawn Smith

Energy for What's AheadSM



Scope

- The purpose of this conference is to assist potential Offerors in participating in SCE's CR-RAM 4 RFO
- We will not be discussing specific modifications to any of the documents or pro forma agreements
- This conference call is being recorded and will be posted on the CR-RAM 4 RFO website for review at:
<https://www.sce.com/wps/portal/home/procurement/solicitations/cr-ram>
Note: change from previous CR-RAM RFOs

Please hold any questions until the end. At the conclusion of the presentation, there will be an opportunity to ask questions.

Independent Evaluator (IE)

- Requirement for an IE mandated through CPUC Orders
- IE performs an independent review of the proposals and a detailed review of the utility evaluation and selection process
- The IE monitors communications between SCE and Offerors and is copied on all correspondence
- The IE has access to all bid data
- Merrimack Energy has been retained as the IE for this solicitation:
 - Keith Oliver (keith.oliver@merrimackenergy.com) - key contact

RFO Materials

- All RFO Materials are located on either the:
 - CR-RAM 4 RFO website; or
 - SCE Customer Service CR for marketing materials
- RFO Materials include but are not limited to the following:

RFO Instructions	ECR Rider
Evergreen NDA	CPUC Decision (D.) 16-05-006
D. 15-01-051	SCE Advice Letter (AL) 3557e
Notice List	Sellers Milestone Schedule and Material Permits
Project Viability Calculator V2	Locational Congestion Adders
Development Experience Letter	Transmission Consent Form
CCA Code of Conduct	Green-e Code of Conduct

- All Offeror communications go through RFO@sce.com and cc IE at keith.oliver@merrimackenergy.com

Document Conflicts

- This presentation is intended to be a summary level discussion of the information and requirements established in the RFO Materials and does not include all of the detailed information in the RFO Materials
- To the extent that there are any inconsistencies between the information provided in this presentation and the requirements established in the RFO Materials, the RFO Materials will govern
- Capitalized terms used but not defined in these slides are defined in the RFO Materials

Supplier Diversity

- SCE encourages Diverse Business Enterprises (“DBE”) to participate in this CR-RAM 4 RFO
- GO 156 establishes requirements for the development of programs to increase participation of DBEs in procurement of contracts from utilities.
- For additional information, please visit www.sce.com/SD and <http://www.cpuc.ca.gov/PUC/documents/go.htm>
 - Guidance is also available at www.sce.com/EnergyProcurement under the heading “Help & Guidance”
- Offerors can help SCE achieve its GO 156 goals and comply with the same as follows:
 - Participate as a qualified DBE (Tier 1 – direct contracting with SCE).
 - Participate as a qualified DBE subcontractor to an Offeror (Tier 2 – subcontracting)
 - To be qualified, DBE owned companies (Offerors and subcontractors) must register with the CPUC Supplier Clearinghouse (www.thesupplierclearinghouse.com)
 - Disabled Veteran Owned Business Enterprises in California are certified through the California Department of General Services (www.dgs.ca.gov/) and are automatically recognized by the Supplier Clearinghouse.
- SCE’s Supplier Diversity efforts include encouraging its Sellers to develop plans to utilize DBE subcontractors
 - SCE can help with identifying DBEs for subcontracting opportunities. In addition, the CR-RAM PPA includes a requirement to report payments made to DBEs that supplied goods or services as subcontractors.

Keys to a Successful Proposal

- Start the offer preparation process early
 - Submit marketing material to SCE Customer Service
 - Review and begin filling out the “Offer Form”
- Submit a complete offer
 - Carefully read and follow the RFO Instructions and the Offer Form help information
 - If you have questions completing offers, email RFO@sce.com and cc the IE at keith.oliver@merrimackenergy.com
- Make sure your submitted offer is internally consistent and you provide evidence of a viable project
- Since the “Offer Form” is a Microsoft Word document, you can save it and continue later

CR-RAM 4 RFO Schedule*

Milestones	Estimated
Launch RFO	May 23, 2018
Web conference	May 31, 2018
Receive Offers	June 21, 2018
Selections (including identification of waitlist)	August 3, 2018
Notify Offerors	August 13, 2018
60 Day Verification for Community Interest (CR-RAM requirement)	October 13, 2018
Execute 1 st Round of Selections and Notify Waitlist	November 13, 2018

* SCE reserves the right to revise this schedule at any time and in SCE's sole discretion. Respondents are responsible for monitoring the RFO Website for updates and possible amendments to the RFO, the RFO Instructions or the solicitation process.

CR-RAM Summary

Shawn Smith

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Background

- SB 43's goal: encourage the use of renewable energy, for those who might not have access to products such as solar rooftop
- D.15-01-051, D.16-05-006 & Resolution E-4734 established the GTSR program to implement SB 43
- CR Environmental Justice (CR-EJ) projects are 1 MW or less, located in SCE's 20% most impacted communities using CalEnviroScreen
- Minimum customer subscription requirement ramps from 45% in year one to 95% in year four and beyond
- Beginning in the CR-RAM 3 RFO, Distributed Energy Resources (DERs) aggregated (DERAs) to 500 kW and above are eligible

GTSR - 269 MW target - 45 MW reserved for EJ

- **Projects within SCE territory**
- **206 MW remaining**

CR-RAM

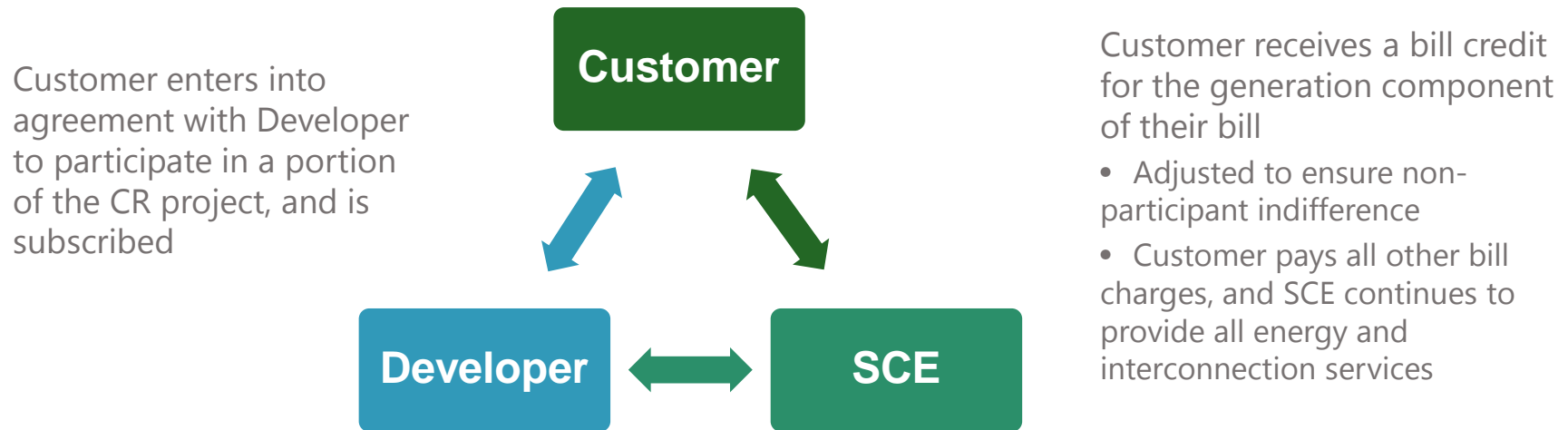
- 0.5 MW to 20 MW project size
- SCE bundled customers subscribe to a CR project with a developer
- RPS standard contract with CR-RAM Rider. Auction with special rules

Green Rate

- 0.5 MW to 20 MW project size
- Customers subscribe to renewable energy to cover 50% or 100% of their load
- Advance procurement through RAM 6 and RPS standard contract

CR-RAM Overview

- Customer purchases renewable energy from a new, “community” based renewable project
- Customer receives a bill credit from SCE for their subscription



Once community interest requirement¹ is met:

- Developer and SCE enter into a PPA (RPS standard contract with CR-RAM Rider)
- SCE is the Scheduling Coordinator for the PPA
- RECs from subscribed energy are retired on behalf of subscribing customers (i.e. will not count towards SCE’s RPS targets)
- If project is undersubscribed, SCE may count RECs towards its RPS target

¹ Community Interest Requirement: 1) 30% “committed to enroll,” or 51% “expression of interest” and, in each case, a minimum of 3 separate subscribers or a guarantee from a municipality, and 2) 1/6 residential by load and, 50% residential by customer count, and 3) community members must be in same municipality or county or within 10 miles of project. Documentation submitted to demonstrate Community Interest must be executed on or after May 23, 2017

CR-RAM Procurement

- SCE is required by the CPUC to hold five CR-RAM solicitations
 - This is the fourth of the five RFOs
- This auction is for 161 MW of CR and 45 MW of CR-EJ
- Renewables Portfolio Standard (RPS) standard contract with CR-RAM Rider
- Fixed price offers only
- 10, 15, or 20 year contract options
- Least Cost Best Fit (LCBF) RPS selection process
- Price cap is 120% for CR and 200% for CR-EJ of the highest executed RPS 2015 Green Rate PPA

Marketing Material

Mary Hanway

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Marketing Materials Overview

- Under the California Enhanced Community Renewables (“CR”) program, Developers market their projects directly to customers and, as part of the program, agree to comply with Green-e® Energy environmental and consumer protection standards. Compliance includes following Green-e® Energy guidelines on all product marketing
- All developer marketing materials must comply with [Green-e® Energy Developer Requirements](#)
- To begin the review process, all materials intended to be used for marketing to potential customers, are submitted to: CommRenewables@sce.com
- Marketing materials must align with the requirements of:
 - Marketing Phase One: Community Interest
 - Marketing Phase Two: Customer Enrollment
 - Marketing Phase Three: Annual Marketing Materials Submission

Marketing Material Phases Overview

- Marketing Phase One: Community Interest
 - Marketing Materials enable Developers to provide program information to engage with potential customers
 - Customers may sign “non-binding” expressions of interest
 - Demonstration of Community Interest is achieved through:
 - 1) Documented Commitments to Enroll in 30% of the project’s capacity or documented Expressions of Interest reaching 51% subscription rate and in each case have at least three separate subscribers OR (2) have a guarantee from a municipality working to develop ECR projects in its community AND
 - At least 50% (by number of customers) and 1/6th (by load) of the demonstrated community interest must come from residential customers
 - Subscribers must be located within the same municipality or county or within 10 miles of the project’s address
 - Documentation submitted to demonstrate Community Interest must be executed on or after May 23, 2017 (one year prior to RFO launch).

Marketing Material Phases Overview (cont'd)

- Marketing Phase Two: Customer Enrollment
 - Marketing Materials enable Developers to provide detailed program information to potential customers
 - All marketing materials, pricing, terms and conditions must be reviewed and approved by Green-e® Energy prior to execution of the CDA
 - Community Interest must be demonstrated within the 60 day verification window or the project is no longer eligible for continued participation in the auction
 - Developers may enter into binding agreements with customers (including binding expressions of interest and CDA's) only after a PPA with SCE is executed.
- Marketing Phase Three: Annual Marketing Materials Submission
 - Ongoing submission of all marketing materials to SCE to ensure compliance with Green-e® Energy Developer Requirements

Phase One Components

Required Components

Requirements for Optional Components

Cover Sheet and Initial Marketing Piece

- Developer
- Name of proposed Facility
- Location
- Facility Size
- Developer Relationship with SCE
- How Will the Customer be Billed

Upfront Disclosures

- Templates are available on Green-e® Energy's website

Website

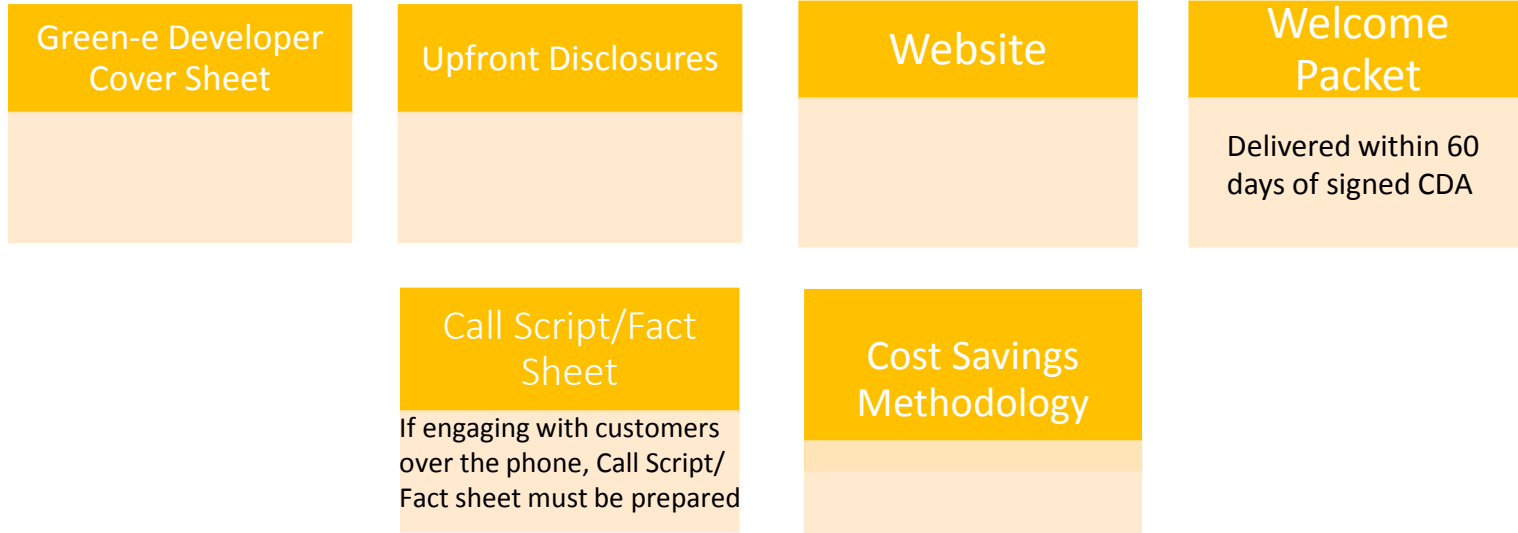
- 1 customer-facing page per project
- Link to SCE's ECR site
- Link to the Green-e® Energy's ECR site & customer service contact info (see Green-e® site for other elements)
- Description of Green-e® Energy and Green-e® Energy certification

Call Script/ Fact Sheet

- Only required if contact information is included in marketing materials

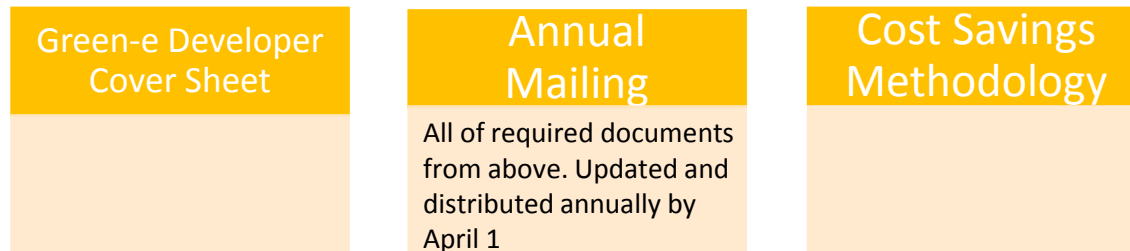
Phase Two Components

Required Components



Phase Three Components

Required Components



What To Expect When You Submit

- Confirmation of receipt is typically provided via email within 2 business days
- Submissions are initially assessed for completeness. Content review will commence when all required materials have been submitted.
- Submissions that include all of the required elements and align with Green-e® Developer Requirements are anticipated, but not guaranteed, to be confirmed as “in compliance” within a 30 day period.
 - You should expect to receive feedback regarding any required edits within 10 to 15 business days
- Missing components and multiple required iterations will extend this timeline

Minimizing the Need to Resubmit

- Clarify statements concerning “cost savings” with either methodology or footnote
- Clarify statements concerning “fixed price”
 - Although CDA’s may offer a fixed price to customers, SCE charges and credits may fluctuate over time (up or down)
- SCE “Bill Credit” should be referred to as a “bill credit” or “credit”
 - Materials should not refer to SCE’s bill credit as a “reward”
- Upfront Disclosure template must be included. Template is available on Green-e® Energy ECR site
- Call Sheet/Fact Sheet is always required when contact information is included in marketing materials
- Nonuse of Green-e Logo nor SCE’s logo but permitted to provide link to SCE’s program webpage

RFO Details

Ted Herman

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Key Eligibility Requirements

- Generating facility must be a **newly constructed** renewable resource (“ERR”), 0.5 MW to 20 MW
- Projects under 0.5 MW may aggregate to at least 0.5 MW
- The Project must be located within the SCE electric service territory and be interconnected to SCE’s electric distribution or transmission system
- The Project must have an interconnection agreement, a Phase II Interconnection study or passed Fast Track screens
- Forecasted Commercial Operation Date must be within 36 months of the anticipated date for final and non-appealable CPUC Approval of a final agreement

Key Eligibility Requirements (cont'd)

- Offeror must have site control, submit applicable development experience, and the Project must be based on commercialized technology
- SCE affiliation must be disclosed, if applicable
- Delivery point must be at the first point of interconnection to the CAISO controlled grid
- Offeror must agree to non-disclosure requirements in the CR-RAM 4 RFO Non-Disclosure Agreement
- Offeror has provided other information requested by SCE
- 2 MW of project load maximum for individual subscriber¹
- Additional requirements are discussed in the RFO Materials

¹This limitation does not apply to a federal, state, or local government, school or school district, county office of education, the California Community Colleges, the California State University, or the University of California.

Key Eligibility Requirements (cont'd)

- Projects must have completed either:
 - Phase II Interconnection Study or equivalent or better
 - A signed interconnection agreement
- If utilizing the Fast Track process
 - Written evidence from Grid Interconnection that the project has passed all fast track screens and no further studies are required
- Questions
 - Please visit our “Open Access” page for additional information regarding the interconnection process and for links to the applicable tariffs
 - <https://www.sce.com/gridinterconnection>
 - InterconnectionQA@sce.com
 - (626) 302-3688

Offer Price Assumptions

- The Offer price must be developed with consistent assumptions, taking into account, among other factors, the following:
 - Grid Interconnection Costs
 - Direct Assignment Costs – Seller bears the Direct Assignment Costs because there is no reimbursement of these costs to Seller
 - Network Upgrades – Seller bears the cost of financing the Network Upgrades¹ (unless the upgrades are pre-funded and such pre-funding has been approved by the CPUC)
 - Awards – Production Tax Credits, Investment Tax Credits and all other awards that Seller reasonably expects to apply
 - Payments will be adjusted in each time of delivery (“TOD”) period by the Product Payment Allocation Factors set forth in the PPA

¹Developer is entitled to repayment with interest over a 5 year period following initial operation. Interest will be calculated in accordance with FERC’s regulations at 18 C.F.R. §35.19a(a)(2)(iii).

Offer Price Assumptions (cont'd)

- The Offer price must be developed with consistent assumptions, taking into account, among other factors, the following:
 - Distribution loss factors (“DLFs”)
 - Offer price should not include DLFs
 - SCE will incorporate them as applicable
 - Collateral requirements
 - Development security
 - Performance assurance

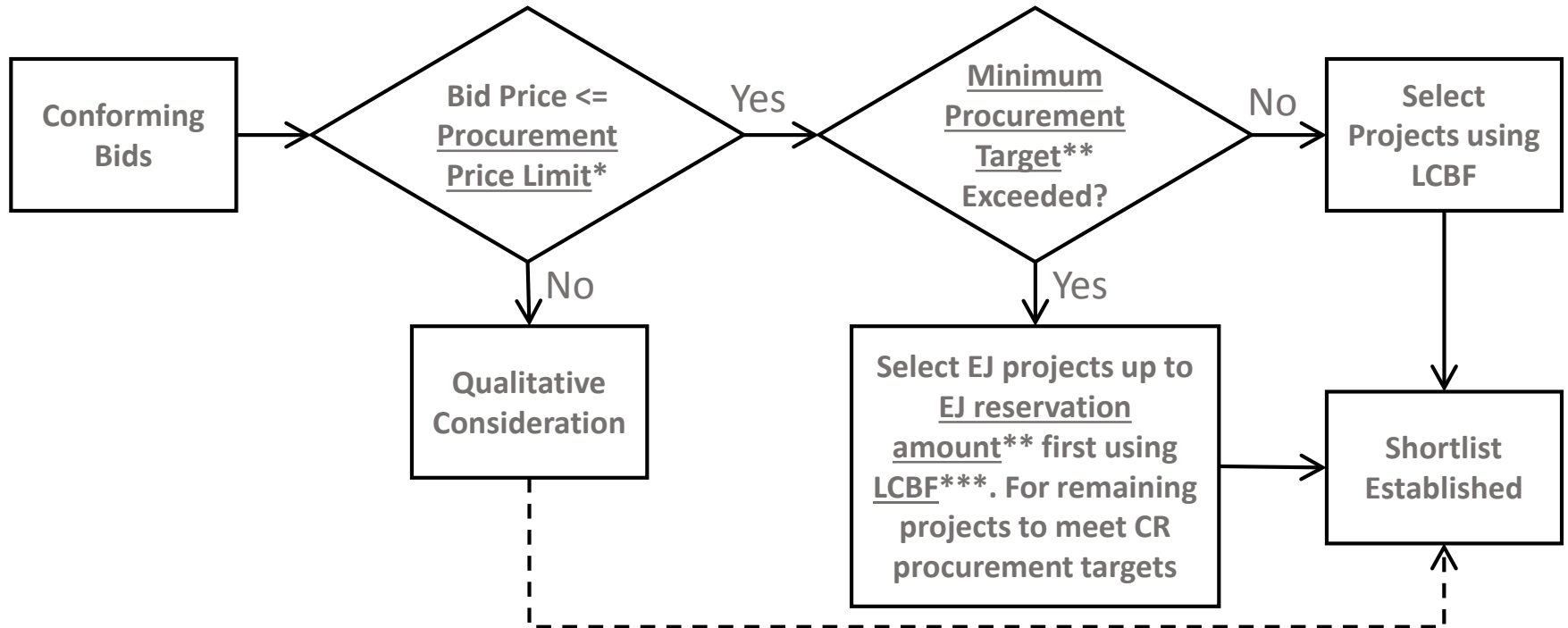
Evaluation & Selection

Steven van Deventer

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Evaluation & Selection



* Procurement Price Limit: Price cap is 120% for CR and 200% for CR-EJ of the maximum executed contract price in the most recent Green Tariff program (D.16-05-006)

** Minimum Procurement Target: 45MW for CR-EJ and 161MW for total, below price caps

*** LCBF: Least Cost, Best Fit (LCBF) Methodology was approved by CPUC in D. 17-12-007 (SCE's 2017 RPS Plan)

Evaluation & Selection (cont'd)

Levelized Costs	Levelized Benefits
<p><u>Contract Payments</u></p> <ul style="list-style-type: none"> • TOD-adjusted, based on the proposed energy price, expected generation profile and contract term <p><u>Transmission Cost*</u></p> <ul style="list-style-type: none"> • Cost adders for required network upgrades based on latest Interconnection Study or Agreement <p><u>Debt Equivalence Cost</u></p> <ul style="list-style-type: none"> • Cost of mitigating contract commitments on SCE's balance sheet <p><u>Integration Cost</u></p> <ul style="list-style-type: none"> • Cost of maintaining a reliable energy supply • \$3/MWh for solar and \$4/MWh for wind for variable cost • Fixed cost based on flexible capacity need and price 	<p><u>Energy Benefits</u></p> <ul style="list-style-type: none"> • Market value of energy based on SCE's internal forecast and the submitted generation profile of the resource <p><u>Capacity Benefits</u></p> <ul style="list-style-type: none"> • Based on SCE's forecast of net capacity value and the expected quantity of Resource Adequacy (RA) • RA quantities are based on Commission's applicable accounting rules (Effective Load Carrying Capacity) <p><u>Congestion**</u></p> <ul style="list-style-type: none"> • Locational benefit resulting from certain resource locations • Incremental Cost Adder for projects that deliver energy

Offers are ranked based on a present value of net levelized benefit:

Levelized Benefits – Levelized Costs = Net Market Value

*SCE will only consider reimbursable transmission upgrade costs paid for by SCE customers

- All high voltage (>=200kV) related transmission upgrade costs in CAISO area will be shared by Participating Transmission Owners (~43% for SCE's customers)
- All low voltage (<200kV) related transmission upgrade costs in SCE's territory will be paid for by SCE's customers

**Congestion can result in either a positive or negative cash flow

Required Documents

Wil Grady

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Exhibit B: Generating Facility and Site Description

- Exhibit B issues are among the most common reasons offers “fail” during the initial offer screening process
 - Although SCE works with offerors to cure deficiencies, some offers have been disqualified due to inadequate Exhibit B documentation, even after opportunities to cure have been provided
 - Careful attention to this section can save time, hassle, and stress during the RFO process
- What is included in Exhibit B?
 - Generating Facility Description
 - Single Line Drawing
 - Site Plan Drawing
 - Legal Description of the Site
 - Site Map
- Why is Exhibit B important?
 - SCE expects the as-built Generating Facility and Site to be exactly as described

Exhibit B: Generating Facility and Site Description (cont'd)

- General issues
 - Project name on PPA does not match project name in some or all Exhibit B docs
 - Equipment and related details are inconsistent among the various Exhibit B docs
 - Mismatch in project size or other major details with Interconnection Study
 - Any known discrepancies should be explained in a letter accompanying the offer
 - If generating facility design varies from what appears in the Interconnection Study, Transmission Provider must provide an assurance letter that design changes will not impact COD or network upgrade cost
- Site Plan Drawing, Legal Description of the Site and Site Map
 - Clearly illustrate the boundaries of the site and any adjacent generating facilities
 - Equipment locations must be clear (e.g., inverters, solar arrays, wind turbines, interconnection equipment, etc.)
 - In legal description, only list APNs that are part of the Site or include a note linking the site map to the legal description

Exhibit B: Generating Facility and Site Description (cont'd)

- Single Line Drawing and Process Flow Diagram
 - Be sure to include and adequately describe all major equipment
 - Common missing items are:
 - Interconnection point (substation name, equipment type and number, circuit name, etc.)
 - Transformer specifications
 - Substation station light and power
 - Generating Facility station service (auxiliary) transformer
 - Metering (Transmission Provider, CAISO, SCE, Seller)
 - Number of boilers, steam turbines, generators etc.
 - Typical generating unit diagram
 - Type of generator (synchronous, asynchronous, inverter, etc.)
- Key Takeaways
 - Refer to the RFO Instructions when preparing documents
 - Label everything and err on the side of inclusiveness
 - Pay attention to the details, we look at these documents very closely

Q&A

- To ask a question:
 - Press *1 and wait for the prompt from the operator
- Time will be left at the conclusion of the conference for additional Q&A
- After the conference, SCE will compile and post a Q&A document on the CR-RAM 4 RFO website (<https://www.sce.com/wps/portal/home/procurement/solicitations/cr-ram>)
 - Written responses supersede any responses given in this conference

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